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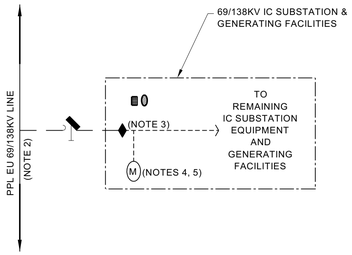


SINGLE-LINE DIAGRAM (TAPPED 69/138KV LINE INTERCONNECTION)

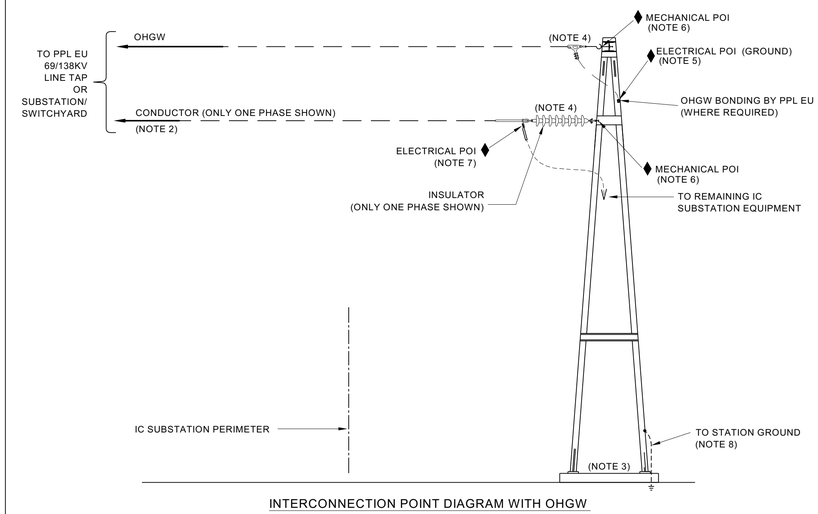
LEGEND

- <PJM QUEUE #> FACILITIES (OWNED BY IC)
- PPL EU OWNED FACILITIES
- POI
- (M) REVENUE METERING EQUIPMENT (OWNED BY PPL EU OR IC)
- MOTOR OPERATED LOAD BREAK AIR BREAK (OWNED BY PPL EU)
- RELAY PROTECTION (OWNED BY IC)
- REMOTE TERMINAL UNIT (OWNED BY IC)

FID - FAULT INTERRUPTING DEVICE
IC - INTERCONNECTION CUSTOMER
ISA - INTERCONNECTION SERVICE AGREEMENT
POI - POINT OF INTERCONNECTION

NOTES

1. THE INTENT OF THIS DIAGRAM IS TO CLEARLY DELINEATE THE OWNERSHIP BOUNDARIES BETWEEN PPL EU AND THE IC. THIS DIAGRAM IS NOT INTENDED TO ILLUSTRATE ACTUAL DESIGN DETAILS. ANY DETAILS ON THIS DIAGRAM THAT MAY ILLUSTRATE ACTUAL DESIGN DETAILS, IN ANY WAY, ARE PURELY COINCIDENTAL.
2. ALTHOUGH THIS DIAGRAM ILLUSTRATES A TAPPED LINE INTERCONNECTION WITH THE PPL EU SYSTEM, THE INTERCONNECTION CAN ALSO BE WITH A PPL EU 69/138KV SUBSTATION/SWITCHYARD.
3. THE POI IS AT THE DEADEND STRUCTURE INSIDE THE IC SUBSTATION.
4. REGARDLESS OF OWNERSHIP (PPL EU OR IC), THE REVENUE METERING EQUIPMENT SHALL BE INSTALLED ON THE HIGH SIDE OF THE IC TRANSFORMER(S) BEFORE THE HIGH SIDE FID(S).
5. PJM PROVIDES THE IC THE OPTION TO OWN THE REVENUE METERING EQUIPMENT. THE PJM ISA SHALL DICTATE OWNERSHIP (PPL EU OR IC) OF THE REVENUE METERING EQUIPMENT.
6. FOR A BREAKDOWN OF THE IC AND PPL EU RESPONSIBILITIES RELATED TO REVENUE METERING EQUIPMENT, RELAY PROTECTION AND THE REMOTE TERMINAL UNIT, REFER TO PPL EU DOCUMENT EU00530561.



INTERCONNECTION POINT DIAGRAM WITH OHGW

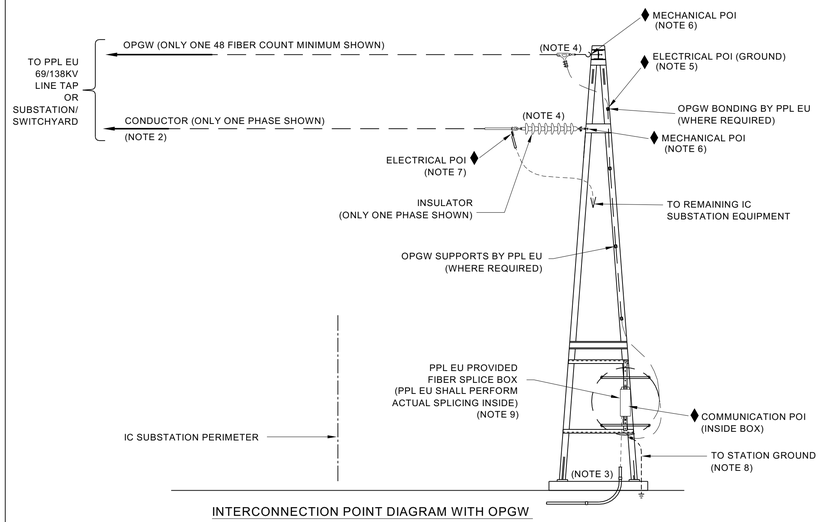
LEGEND

- <PJM QUEUE #> FACILITIES (OWNED BY IC)
- PPL EU OWNED FACILITIES
- POI

IC - INTERCONNECTION CUSTOMER
OHGW - OVERHEAD GROUND WIRE
POI - POINT OF INTERCONNECTION

NOTES

1. THE INTENT OF THIS DIAGRAM IS TO CLEARLY DELINEATE THE OWNERSHIP BOUNDARIES BETWEEN PPL EU AND THE IC. THIS DIAGRAM IS NOT INTENDED TO ILLUSTRATE ACTUAL DESIGN DETAILS. ANY DETAILS ON THIS DIAGRAM THAT MAY ILLUSTRATE ACTUAL DESIGN DETAILS, IN ANY WAY, ARE PURELY COINCIDENTAL.
2. ONLY ONE PHASE CONDUCTOR IS SHOWN FOR CLARITY. MULTIPLE BUNDLED CONDUCTORS (DOUBLE, TRIPLE, ETC.) PER PHASE MAY ALSO EXIST, BUT ARE NOT SHOWN ON THIS DIAGRAM.
3. THE IC DEADEND STRUCTURE ILLUSTRATED IS REPRESENTATIVE OF A TYPICAL DEADEND STRUCTURE. ACTUAL IC DEADEND STRUCTURE TYPE MAY BE DIFFERENT.
4. SEE PPL EU STANDARD ELECTRICAL ASSEMBLIES FOR MORE INFORMATION. THE NUMBER OF INSULATOR SEGMENTS WILL BE DEPENDENT ON THE LINE VOLTAGE AND BASIC INSULATION LEVEL (BIL) RATINGS.
5. PPL EU SHALL FASTEN OHGW AND PROVIDE EXCESS GROUND WIRE OR JUMPER TO BOND TO THE IC DEADEND STRUCTURE IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.
6. PPL EU SHALL PROVIDE AND INSTALL ALL LINE MOUNTING HARDWARE TO CONNECT TO THE IC DEADEND STRUCTURE. THE IC DEADEND STRUCTURE SHALL INCLUDE VANGS IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.
7. THE IC SHALL PROVIDE AND INSTALL ALL JUMPER LOOP HARDWARE TO CONNECT TO THE PPL EU PHASE CONDUCTOR NEMA PADS.
8. THE IC SHALL GROUND THE DEADEND STRUCTURE IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.



INTERCONNECTION POINT DIAGRAM WITH OPGW

LEGEND

- <PJM QUEUE #> FACILITIES (OWNED BY IC)
- PPL EU OWNED FACILITIES
- POI

IC - INTERCONNECTION CUSTOMER
OPGW - OPTICAL GROUND WIRE (FIBER)
POI - POINT OF INTERCONNECTION

NOTES

1. THE INTENT OF THIS DIAGRAM IS TO CLEARLY DELINEATE THE OWNERSHIP BOUNDARIES BETWEEN PPL EU AND THE IC. THIS DIAGRAM IS NOT INTENDED TO ILLUSTRATE ACTUAL DESIGN DETAILS. ANY DETAILS ON THIS DIAGRAM THAT MAY ILLUSTRATE ACTUAL DESIGN DETAILS, IN ANY WAY, ARE PURELY COINCIDENTAL.
2. ONLY ONE PHASE CONDUCTOR IS SHOWN FOR CLARITY. MULTIPLE BUNDLED CONDUCTORS (DOUBLE, TRIPLE, ETC.) PER PHASE MAY ALSO EXIST, BUT ARE NOT SHOWN ON THIS DIAGRAM.
3. THE IC DEADEND STRUCTURE ILLUSTRATED IS REPRESENTATIVE OF A TYPICAL DEADEND STRUCTURE. ACTUAL IC DEADEND STRUCTURE TYPE MAY BE DIFFERENT.
4. SEE PPL EU STANDARD ELECTRICAL ASSEMBLIES FOR MORE INFORMATION. THE NUMBER OF INSULATOR SEGMENTS WILL BE DEPENDENT ON THE LINE VOLTAGE AND BASIC INSULATION LEVEL (BIL) RATINGS.
5. PPL EU SHALL FASTEN OPGW AND SUPPORT EXCESS GROUND WIRE DOWN THE IC DEADEND STRUCTURE AND TERMINATE INSIDE PPL EU PROVIDED FIBER SPLICE BOX IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.
6. PPL EU SHALL PROVIDE AND INSTALL ALL LINE MOUNTING HARDWARE TO CONNECT TO THE IC DEADEND STRUCTURE. THE IC DEADEND STRUCTURE SHALL INCLUDE VANGS IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.
7. THE IC SHALL PROVIDE AND INSTALL ALL JUMPER LOOP HARDWARE TO CONNECT TO THE PPL EU PHASE CONDUCTOR NEMA PADS.
8. THE IC SHALL GROUND THE OPGW AND DEADEND STRUCTURE IN ACCORDANCE WITH PPL EU STANDARD SPECIFICATIONS.
9. PPL EU SHALL PERFORM END-TO-END FIBER TESTING.

DEVELOPED FROM STANDARD DRAWING EU00535115, SH. 1, REV. 0

PPL ELECTRIC UTILITIES

ACCT.- 10023534	STANDARD - SUBSTATION & SWITCHYARD - IPP
ECN #- 8998	69/138KV IPP POINT OF INTERCONNECTION (POI)
SCALE- NONE	TYPICAL DIAGRAMS
BY- RRC/BAS	PJM QUEUE XXX-YYYZ
REV'D-RNJ	
APPROVED EDWARD D. LEGENSKI	DATE PPL ELECTRIC UTILITIES
AC / D	DRAWING NO. EU00535115 / SHEET NO. 1 / REVISION 1

Document #: EU00535115 Approved by: Matone, Nicholas J 2/1/2018

REFERENCE TITLE	NUMBER	REFERENCE TITLE	NUMBER	NO.	DATE	ACCT.	ECN/FCN	REVISION	BY	REV'D	APPR.
69KV & 138KV PARALLEL GENERATION REQUIREMENTS	EU00530561			1	1/25/18	10023531	ECN-9379	AT THE DIRECTION OF PJM INTERCONNECTION THE PJM DEFINITION WAS REMOVED FROM THE SINGLE LINE DIAGRAM LEGEND	JTC	EDL	

CAD ID: AC | FORMAT: D | PLAN & PROFILE PRIMARY | PLAN & PROFILE NO. | PRIMARY LOC CODE: S060 | LOC CODE | LOC CODE | LOC CODE | SORTS: E | SHARE: N | THIS FORMAT CONTAINS REQUIRED METADATA ATTRIBUTES

PPL ELECTRIC UTILITIES FORM 4877 (02/16)