

**ATTACHMENT D**  
**DECLARATION OF ERON LLOYD**

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

MAW Communications, Inc.,

*Complainant,*

v.

PPL Electric Utilities Corporation,

*Defendant.*

File No.

**DECLARATION OF ERON LLOYD**

I, ERON LLOYD, declare as follows:

1. I serve as Director of Information and Communication Technology for MAW Communications, Inc. ("MAW"), with a general office address of 419 Washington Street, Reading, Pennsylvania 19603. I make this Declaration in support of MAW's Pole Attachment Complaint in the above-captioned case. I know the following of my own personal knowledge, and if called as a witness in this action, I could and would testify competently to these facts under oath.

2. I have served as Director of Information and Communication Technology for one year. In this role, I am responsible for all outside plant and central office operations, which include network design, engineering, construction, and maintenance.

3. I have reviewed the allegations in the Pole Attachment Complaint filed in this proceeding as well as the exhibits attached hereto and verify that they are true and correct to the best of my knowledge, information and belief.

4. MAW’s LanCity Connect project involves over 50 route miles of aerial plant—27 route miles of existing fiber and approximately 26 route miles of planned fiber—requiring attachments to over 2,000 utility poles in PPL’s service area.

5. MAW utilizes lightweight, all-dielectric self-supporting (“ADSS”) fiber cable for its service drops. This material differs significantly from the facilities used for its backbone network. In addition, the feeder (backbone) cables are supported by steel strand, adding weight and conductive properties that do not exist for the ADSS fiber attachments.

6. NESC Rule 238 governs vertical clearance of span wires and brackets from communication lines and equipment. Table 238-2 sets forth the vertical clearance required for wires and brackets carrying luminaires (street lights) and traffic signals that are and are not effectively grounded. The clearance requirement for effectively grounded streetlights is 4 inches (except where communications lines use support arms). Until 2017, the clearance requirement for “not effectively grounded” streetlights located above communications messengers was 20 inches.<sup>1</sup> In 2017, the NESC clearance requirement for “not effectively grounded” streetlights located above communications messengers changed from 20 inches to 40 inches.<sup>2</sup> NESC rule 013.B. grandfathers existing installations provided they comply with the rules that were in effect at the time of the original installation, until they are brought into compliance with rules in a subsequent edition.<sup>3</sup> Accordingly, any communications strand attachments 20 or more inches below a streetlight made prior to the effective date of the NESC 2017 edition are compliant, until PPL or the City brings the streetlights into compliance with the 2017 edition, which it should do by grounding the streetlights.

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<sup>1</sup> See Table 238-2 from NESC 2012 edition, attached hereto as Exhibit 1.

<sup>2</sup> See Table 238-2 from NESC 2017 edition, attached hereto as Exhibit 2.

<sup>3</sup> See NESC Rule 013, attached hereto as Exhibit 3.

7. PPL's online portal requires attachers to choose a type of attachment—e.g., “Typical Attachment/Removal Application,” “NJUNS Ticket,” “Relocation Project.” Until late July/early August 2018, the online application portal did not include a “Rebuild” type of attachment. PPL later used this failure to reject and reset MAW's attachment applications that were submitted four months earlier using the closest available category.<sup>4</sup>

8. NESC Rule 214.A.5 differentiates required management of serious safety issues from other compliance issues, to wit: “Lines and equipment with recorded conditions or defects that would reasonably be *expected to endanger human life or property* shall be promptly corrected, disconnected, or isolated. . . . Other conditions or defects shall be designated for correction.”<sup>5</sup> Moreover, under the terms of the Pole Attachment Agreement, MAW is afforded 180 days to remediate a non-compliant attachment; should MAW not meet this timeframe for remediation, only then can PPL, at MAW's expense, can remediate the compliance issue.

9. Under the shield of the Lehigh County Court proceeding, PPL has removed more than 100 of MAW's attachments and, as explained below, is being denied access to repair service outages.

10. On April 25, 2018, MAW resubmitted the rebuild information, using PPL's Form 4834, along with supporting drawings for the J-and-raise rebuild project (“rebuild paperwork”). As an extra step to ensure against PPL's rejection of MAW's rebuild paperwork submission, MAW also resubmitted its rebuild applications for the J-and-raise rebuild attachments via the online portal on June 4, 2018. PPL rejected both the online portal submissions, because they were not filed in the correct portal project “type,” which PPL had not yet created. On August 2,

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<sup>4</sup> See Aug. 16, 2018 email rejecting April 25, 2018 application, attached hereto as Exhibit 4.

<sup>5</sup> See NESC Rule 214.A.5 (emphasis added), attached hereto as Exhibit 5.

2018, MAW resubmitted all rebuild applications via the portal using the newly created application type; PPL reset the submission date to the two month later date.

11. On August 16, 2018, PPL denied MAW's rebuild paperwork because it was not submitted prior to the work being completed, allegedly lacked sufficient detail, and because PPL changed its policy in August 2018 to now require these applications to be submitted via its online portal. At no point did PPL specify the detail that MAW's applications were missing; MAW included all of the information required on the form as well as maps and drawings. PPL constantly changed the reasons why it would not process MAW's applications.<sup>6</sup>

12. MAW submitted 103 service drop applications for all existing 12-count distribution fiber circuits by April 30, 2018 notwithstanding the parties' dispute concerning the definition of service drop in the parties' Pole Attachment Agreement.

13. MAW also submitted a total of 38 backbone applications for all existing 96- and 144-count feeder cable circuits by June 4, 2018.

14. At present, MAW has 76 applications listed as "Pending Admin Review," 48 applications listed as "In Review," and 17 applications listed as "Incomplete" in PPL's online portal. MAW resubmitted the latest such batch of applications on August 2, 2018, over five months ago.

15. At some point between the June 15 meeting and August 2018, PPL created a new "rebuild" job type in its portal, but did not officially notify MAW of the procedural change. MAW learned of the change on a conference call when Mr. Yanek raised the issue as an aside. PPL has consistently taken the position that attachers must monitor the PPL website to learn of changes, and that it will not notify attachers directly of changes to the application process.

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<sup>6</sup> See Exhibit 4.

MAW resubmitted the applications for its backbone promptly after confirming this was PPL's preferred new process for J-and-raise rebuilds. When these applications were completed and resubmitted on August 2, 2018, the submission timestamp was changed to the new, four-month later date.

16. Several of MAW's August 2018 resubmitted applications have been marked incomplete, but PPL has provided no details as to why, citing only to a contractual provision that it claims allows PPL to stop processing MAW's applications based on MAW's refusal to pay the disputed 2016 charges and filing the rebuild application after the construction was complete. Our J-and-raise submission in 2018 was also consistent with PPL's specifications on their website and associated documentation at the time of submission in 2018.

17. PPL has repeatedly changed its application requirements and reset application start dates, resulting in further delay and removal of additional plant. For example, on August 16, 2018, more than four months after MAW submitted its rebuild applications, PPL denied them in part because they were not submitted using the online portal, which PPL did not require until July 30, 2018, long after the applications were submitted, and also because they allegedly lacked unspecified detail.<sup>7</sup>

18. PPL is preventing MAW from accessing its facilities, impairing MAW's ability to repair service outages, including two recent outages on the 600 block of West Chestnut Street, where MAW's facilities were damaged as a result of tree trimming, and the 200 block of West Walnut Street and 300 block of Mulberry Street, where MAW is being denied access to its splice boxes to troubleshoot an outage created by unknown causes.

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<sup>7</sup> See *id.*

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge.

By:   
Eron Lloyd

Dated: February 8, 2019

# EXHIBIT 1

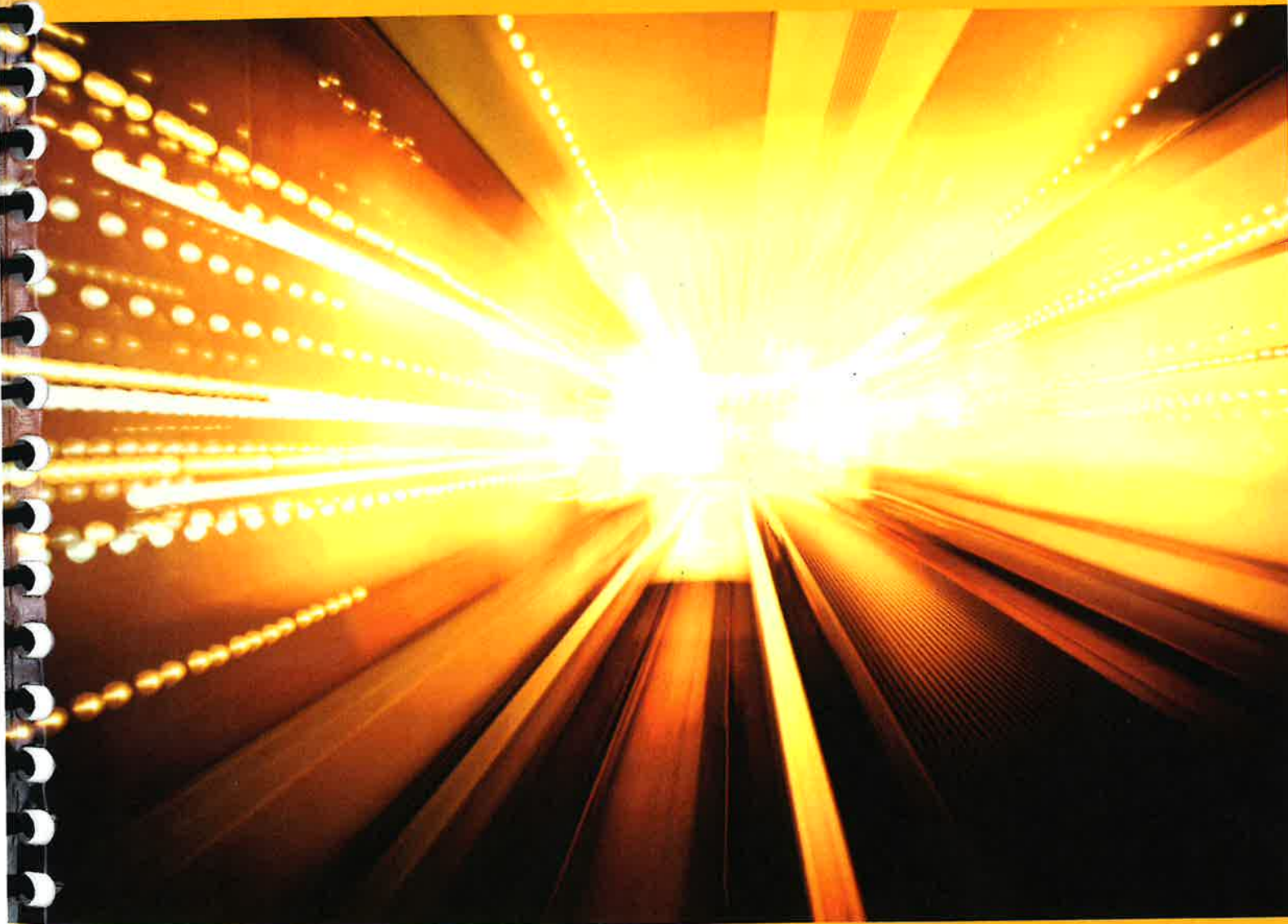


IEEE STANDARDS ASSOCIATION



# National Electrical Safety Code®

C2-2012



3 Park Avenue, New York, NY 10016-5997, USA

MAW000246

**Table 238-2—Vertical clearance of span wires and brackets from communication lines**  
(See also Rule 238C.)

	Carrying luminaires or traffic signals				Carrying trolley conductors			
	Not effectively grounded		Effectively grounded		Not effectively grounded		Effectively grounded	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
Above communication support arms	500	20 <sup>①</sup>	500	20 <sup>①</sup>	500	20 <sup>①</sup>	500	20 <sup>①</sup>
Below communication support arms	1000	40 <sup>③</sup>	600	24	600	24	600	24
Above messengers carrying communication cables	500	20 <sup>①</sup>	100	4	300	12	100	4
Below messengers carrying communication cables	1000	40 <sup>④</sup>	100	4	300	12	100	4
From terminal box of communication cable	500	20 <sup>①</sup>	100	4	300	12 <sup>②</sup>	100	4
From communication brackets, bridle wire rings, or drive hooks	410	16 <sup>①</sup>	100	4	100	4	100	4

①This may be reduced to 300 mm (12 in) for either span wires or metal parts of brackets at points 1.0 m (40 in) or more from the structure surface.

②Where it is not practical to obtain a clearance of 300 mm (1 ft) from terminal boxes of communication cables, all metal parts of terminals shall have the greatest possible clearance from fixtures or span wires including all supporting screws and bolts of both attachments.

③This may be reduced to 600 mm (24 in) for luminaires and traffic signals operating at less than 150 V to ground.

④This may be reduced to 500 mm (20 in) for luminaires and traffic signals operating at less than 150 V to ground.

### 239. Clearance of vertical and lateral facilities from other facilities and surfaces on the same supporting structure

Vertical and lateral conductors shall have the clearances required by this rule from other facilities or surfaces on the same supporting structure.

#### A. General

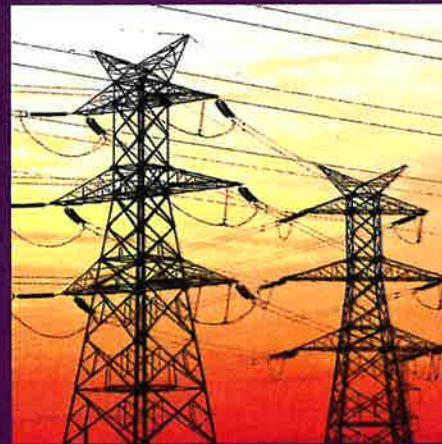
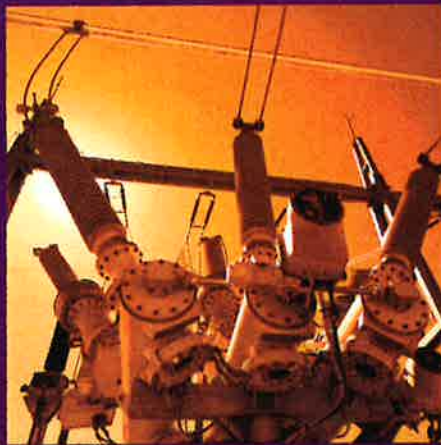
1. Grounding conductors, surge-protection wires, neutral conductors meeting Rule 230E1, insulated communication conductors and cables, supply cables meeting Rule 230C1 or 350B, insulated supply cables of 0 to 750 V, or conduits may be placed directly on the supporting structure. These conductors, wires, cables, and conduits shall be securely attached to the surface of the structure. Cables not in conduit shall be installed in such a manner as to avoid abrasion at the point of attachment.
2. Installation of supply cable and communication cable in same duct or U-guard type covering
  - a. Supply cables 0 to 600 V may be installed together in the same duct or U-guard, if all of the cables are operated and maintained by the same utility.

# EXHIBIT 2



# 2017 National Electrical Safety Code<sup>®</sup> (NESC<sup>®</sup>)

## C2-2017



**100<sup>TH</sup>** ANNIVERSARY EDITION



**IEEE**

3 Park Avenue, New York, NY 10016-5997, USA

## E. Communication worker safety zone

The clearances specified in Rules 235C and 238 create a communication worker safety zone between the facilities located in the supply space and facilities located in the communication space, both at the structure and in the span between structures. Except as allowed by Rules 238C, 238D, and 239, no supply or communication facility shall be located in the communication worker safety zone.

**Table 238-1—Vertical clearance between supply conductors and communications equipment, between communication conductors and supply equipment, and between supply and communications equipment**

(Voltages are phase to ground for effectively grounded circuits and those other circuits where all ground faults are cleared by promptly de-energizing the faulted section, both initially and following subsequent breaker operations. See the definitions section for voltages of other systems. See also Rule 238B.)

Supply voltage (kV)	Vertical clearance	
	(m)	(in)
1. Grounded conductor and messenger hardware and supports	0.75	30
2. 0 to 8.7	1.00 <sup>①</sup>	40 <sup>①</sup>
3. Over 8.7	1.00 plus 0.01 per kV <sup>①</sup> in excess of 8.7 kV	40 plus 0.4 per kV <sup>①</sup> in excess of 8.7 kV

①Where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meeting Rule 230E1 or supply cables meeting Rule 230C1 (including the support brackets) are bonded to communication messengers at intervals meeting Rule 092C through out well-defined areas and where communication is at lower levels, clearances may be reduced to 0.75 m (30 in).

**Table 238-2—Vertical clearance of span wires and brackets from communication lines and equipment**

(See also Rule 238C.)

	Carrying luminaires, traffic signals, or trolley conductors			
	Not effectively grounded		Effectively grounded	
	(mm)	(in)	(mm)	(in)
Above communication support arms	1000	40	500	20 <sup>①</sup>
Below communication support arms	1000	40	600	24
Above messengers carrying communication cables	1000	40	100	4
Below messengers carrying communication cables	1000	40	100	4
From terminal box of communication cable	1000	40	100	4
From communication brackets, bridle wire rings, or drive hooks	1000	40	100	4

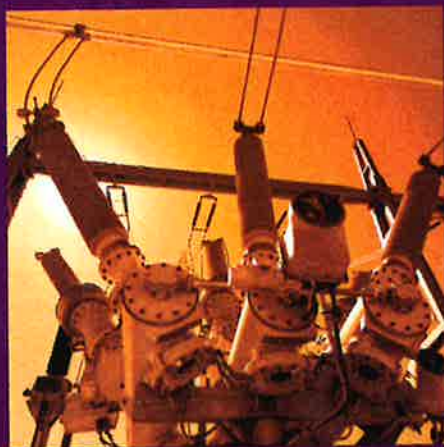
①This may be reduced to 300 mm (12 in) for either span wires or metal parts of brackets at points 1.0 m (40 in) or more from the structure surface.

# EXHIBIT 3



# 2017 National Electrical Safety Code<sup>®</sup> (NESC<sup>®</sup>)

C2-2017



**100**<sup>TH</sup> ANNIVERSARY EDITION



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- b. The personnel installing, maintaining, and operating the system and its components are qualified to do so, are adequately supervised, use appropriate tools, and follow safe work procedures.

## 012. General rules

- A. All electric supply and communication lines and equipment shall be designed, constructed, operated, and maintained to meet the requirements of these rules.
- B. The utilities, authorized contractors, or other entities, as applicable, performing design, construction, operation, or maintenance tasks for electric supply or communication lines or equipment covered by this Code shall be responsible for meeting applicable requirements.
- C. For all particulars not specified, but within the scope of these rules, as stated in Rule 011A, construction and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the construction or maintenance of the communication or supply lines and equipment.

## 013. Application

### A. New installations and extensions

1. These rules shall apply to all new installations and extensions, except that they may be waived or modified by the administrative authority. When so waived or modified, safety shall be provided in other ways.

*EXAMPLE:* Alternative working methods, such as the use of barricades, guards, or other electrical protective equipment, may be implemented along with appropriate alternative working clearances as a means of providing safety when working near energized conductors.

2. Types of construction and methods of installation other than those specified in the rules may be used experimentally to obtain information if:
  - a. Qualified supervision is provided,
  - b. Equivalent safety is provided, and
  - c. On joint-use facilities, all affected joint users are notified in a timely manner.

### B. Existing installations

1. Where an existing installation meets, or is altered to meet, these rules, such installation is considered to be in compliance with this edition and is not required to comply with any previous edition.
2. Existing installations, including maintenance replacements, that currently comply with prior editions of the Code, need not be modified to comply with these rules.

*EXCEPTION 1:* For safety reasons, the administrative authority may require compliance with these rules.

*EXCEPTION 2:* When a structure is replaced, the current requirements of Rule 238C shall be met, if applicable.

3. Where conductors or equipment are added, altered, or replaced on an existing structure, the structure or the facilities on the structure need not be modified or replaced if the resulting installation will be in compliance with either (a) the rules that were in effect at the time of the original installation, or (b) the rules in effect in a subsequent edition to which the installation has been previously brought into compliance, or (c) the rules of this edition in accordance with Rule 013B1. When an existing installation is brought into compliance with a subsequent edition, earlier editions no longer apply.



# EXHIBIT 4

**From :** Yanek, Ryan J <RJYanek@pplweb.com>

Thu, Aug 16, 2018 04:37 PM

**Subject :** Formal Response to MAW Re-build application

2 attachments

**To :** Frank Wiczowski <frank@mawcom.com>, Eron Lloyd (eron@mawcom.com) <eron@mawcom.com>, favyan@mawcom.com, Mindy@MAWcom.com

**Cc :** Eric Winter (ewinter@princelaw.com) <ewinter@princelaw.com>, Jeffrey Franklin (JFranklin@PrinceLaw.com) <JFranklin@PrinceLaw.com>, Joseph D'Amico (jsdamico@flblaw.com) <jsdamico@flblaw.com>, Shafer, Michael J <MJShafer@pplweb.com>, Vinciguerra, Donald <dvinciguerra@pplweb.com>, Dom, Aaron A <AADom@pplweb.com>

Good Afternoon,

We have discussed the status of the attached rebuild application and the process for re-build applications in our technical working meetings which have run over the past 3 months.

I am writing to formally respond to this application to re-build existing MAW communications facilities, and convey information discussed in the series of meetings.

This request is rejected as submitted. The form 4834 was submitted well after work began, and the request does not include sufficient detail for PPL to evaluate the locations where re-build is proposed and validate that they coincide with permitted attachments.

Moving forward, you may be aware from discussions with your team, PPL has updated its Re-build application process to better align with its other Attachment Application Processes.

Attachers have been directed to submit their rebuild applications through the Online Application Management Tool (aka Portal). These improvements create consistency in the application, review and permit issuance process, and provide an interface which makes it easier for applicants to supply the appropriate detail.

This enhancement was also demonstrated for MAW and others in a Web Ex held July 30<sup>th</sup>.

If MAW has any remaining questions on how to re-apply for Rebuild Permits of its authorized attachments, please reach out to PPL.

Please keep in mind that the entire rebuild project (installation and removal) shall be completed within 12 months from the start date unless an extension is requested of and granted by PPL.

Sincerely,

**Ryan J. Yanek, PMP** | Project Manager - ATBS

Distribution Project Management | 610-774-2092 (Desk) | 610-509-6866 (Cell) | [rjyanek@pplweb.com](mailto:rjyanek@pplweb.com)



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**From :** Frank Wiczowski <frank@mawcom.com>

Wed, Apr 25, 2018 12:26 PM

**Subject :** MAW Communications Re-build Application

6 attachments

**To :** PoleAttachmentServices, PPL <poleattachmentservices@pplweb.com>

**Cc :** Jeffrey Franklin <JFranklin@PrinceLaw.com>, Eric Winter <ewinter@princelaw.com>






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MAW000255

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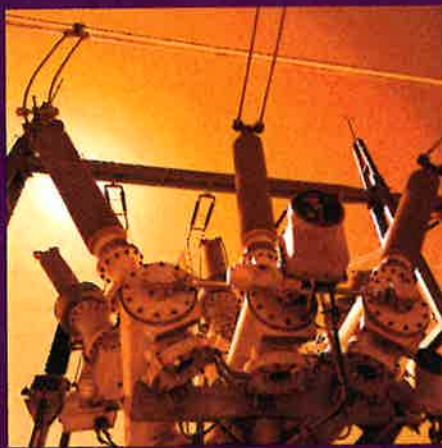


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# EXHIBIT 5

# 2017 National Electrical Safety Code® (NESC®)

C2-2017



**100**<sup>TH</sup> ANNIVERSARY EDITION



3 Park Avenue, New York, NY 10016-5997, USA

## Section 21. General requirements

### 210. Referenced sections

The Introduction (Section 1), Definitions (Section 2), References (Section 3), and Grounding methods (Section 9) shall apply to the requirements of Part 2.

### 211. Number 211 not used in this edition.

### 212. Induced voltages

Rules covering supply-line influence and communication-line susceptiveness have not been detailed in this Code. Cooperative procedures are recommended in the control of voltages induced from proximate facilities. Therefore, reasonable advance notice should be given to owners or operators of other proximate facilities that may be adversely affected by new construction or changes in existing facilities.

*NOTE:* Additional information about supply-line influence and communication-line susceptiveness may be obtained from IEEE Std 776<sup>TM</sup>-1992 [B39] and IEEE Std 1137<sup>TM</sup>-1991 [B51].

### 213. Accessibility

All parts that must be examined or adjusted during operation shall be arranged so as to be accessible to authorized persons by the provision of adequate climbing spaces, working spaces, working facilities, and clearances between conductors.

### 214. Inspection and tests of lines and equipment

#### A. When in service

##### 1. Initial compliance with rules

Lines and equipment shall comply with these safety rules when placed in service.

##### 2. Inspection

Lines and equipment shall be inspected at such intervals as experience has shown to be necessary.

*NOTE:* It is recognized that inspections may be performed in a separate operation or while performing other duties, as desired.

##### 3. Tests

When considered necessary, lines and equipment shall be subjected to practical tests to determine required maintenance.

##### 4. Inspection records

Any conditions or defects affecting compliance with this Code revealed by inspection or tests, if not promptly corrected, shall be recorded; such records shall be maintained until the conditions or defects are corrected.

##### 5. Corrections

- a. Lines and equipment with recorded conditions or defects that would reasonably be expected to endanger human life or property shall be promptly corrected, disconnected, or isolated.



- b. Other conditions or defects shall be designated for correction.
- B. When out of service
  - 1. Lines infrequently used  
Lines and equipment infrequently used shall be inspected or tested as necessary before being placed into service.
  - 2. Lines temporarily out of service  
Lines and equipment temporarily out of service shall be maintained in a safe condition.
  - 3. Lines permanently abandoned  
Lines and equipment permanently abandoned shall be removed or maintained in a safe condition.

## 215. Grounding of circuits, supporting structures, and equipment

- A. Methods  
Grounding required by these rules shall be in accordance with the applicable methods given in Section 9.
- B. Circuits
  - 1. Common neutral  
A conductor used as a common neutral for primary and secondary circuits shall be effectively grounded.
  - 2. Other neutrals  
Primary line, secondary line, and service neutral conductors shall be effectively grounded.  
*EXCEPTION 1:* Circuits designed for ground-fault detection and impedance-current-limiting devices.  
*EXCEPTION 2:* Primary circuits designed with a single point grounded neutral. This type of neutral conductor is not an effectively grounded neutral conductor.
  - 3. Other conductors  
Line or service conductors, other than neutral conductors, that are intentionally grounded, shall be effectively grounded.
  - 4. Surge arresters  
Where the operation of surge arresters is dependent upon grounding, they shall be effectively grounded.
  - 5. Use of earth as part of circuit
    - a. Supply circuits shall not be designed to use the earth normally as the sole conductor for any part of the circuit.
    - b. Monopolar operation of a bipolar HVDC system is permissible for emergencies and limited periods for maintenance.
- C. Non-current-carrying parts
  - 1. General  
Metal or metal-reinforced supporting structures, including lamp posts; metal conduits and raceways; cable sheaths; messengers; metal frames, cases, and hangers of equipment; and metal switch handles and operating rods shall be effectively grounded. For the purpose of this rule metallic stand-off brackets or straps, metal crossarm braces, metal through-bolts, etc., are not considered to be metal frames, cases, or hangers of equipment and therefore not required to be effectively grounded.  
For the purpose of this rule, a wood structure with metal-reinforcing trusses installed at its base for strength purposes is not considered to be a metal-reinforced structure and therefore not required to be effectively grounded.