



Emily M. Farah
Counsel, Regulatory

411 Seventh Avenue
Mail drop 15-7
Pittsburgh, PA 15219

Tel: 412-393-6431
efarah@duqlight.com

January 11, 2022

Via Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120

**Re: Letter of Notification of Duquesne Light Company, Filed Pursuant to 52 Pa. Code Chapter 57 Subchapter G, for Approval to Replace and Relocate Towers on the Z-71 and Z-88 138kV Circuits to Mitigate and Prevent Landslide Damage in the Town of Arlington, and Baldwin Borough, Allegheny County, PA
Docket No. A-2022-_____**

Dear Secretary Chiavetta:

Enclosed please find the Letter of Notification of Duquesne Light Company (“Duquesne Light” or the “Company”), filed pursuant to 52 Pa. Code Chapter 57 Subchapter G, for approval to replace and relocate towers on an approximate 0.7 mile portion of the Z-71 and Z-88 138kv circuits to mitigate and prevent landslide damage in the Town of Arlington and Baldwin Borough in Allegheny County, Pennsylvania. If approved, the Company proposes beginning construction in September 2022.

Attachments 1 and 2 contain Confidential Security Information, or “CSI,” as that term is defined by 52 Pa. Code § 102.1. Duquesne Light respectfully requests the Commission treat Attachments 1 and 2 as **CONFIDENTIAL** and **CSI-CLASSIFIED** documents.

Public versions of the enclosed filing and this letter have been served on the parties listed on the Certificate of Service. If you have any questions, please feel free to contact me.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read "Emily M. Farah", is written over a faint, larger version of the signature.

Emily M. Farah
Counsel, Regulatory

Enclosures

cc: Certificate of Service (w/ non-confidential enclosures)

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Letter of Notification of Duquesne Light Company, Filed Pursuant to 52 Pa. Code Chapter 57 Subchapter G, for Approval to Replace and Relocate Towers on the Z-71 and Z-88 138kV Circuits to Mitigate and Prevent Landslide Damage in the Town of Arlington, and Baldwin Borough, Allegheny County, PA. : : : Docket No. A-2022-_____

LETTER OF NOTIFICATION OF DUQUESNE LIGHT COMPANY

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

I. INTRODUCTION

Pursuant to 52 Pa. Code §§ 57.72(d)-(e), Duquesne Light Company ("Duquesne Light" or the "Company"), files this Letter of Notification ("LON") requesting approval from the Pennsylvania Public Utility Commission ("Commission") for the replacement and reconductoring of 9 existing structures along an approximately 0.7 mile (approximately 3,860 feet) portion of the 138 kilovolt ("kV") Z-71 Carson to Dravosburg Circuit and 138kV Z-88 Carson to Bettis Circuit ("Transmission Z-71 and Z-88 Tower Replacement Project" or the "Project"). The Transmission Z-71 and Z-88 Tower Replacement Project is being proposed to increase structural reliability due to recent weather-related landslides experienced in 2017 and 2018 that affected existing towers 3640, 3642, and the right-of-way corridor between existing towers 3640 and 3643.

The Z-71 and Z-88 circuits run parallel in the Town of Arlington¹ and Baldwin

¹ The Town of Arlington is a neighborhood governed by the City of Pittsburgh.

Borough in Allegheny County, Pennsylvania. If approved, Project construction is scheduled to begin in September 2022, with scheduled in-service by September 2023.

The Company is filing this LON for the Project instead of a full siting application pursuant to 52 Pa. Code § 57.72 (d)(1)(vi) (allowing LONs when the proposed route is 2 miles or less). In support of its request for approval, Duquesne Light states as follows:

II. BACKGROUND

1. Duquesne Light is a public utility as the term is defined under Section 102 of the Public Utility Code, 66 Pa. C.S. § 102, and is certificated by the Commission to provide electric distribution service in portions of Allegheny County and Beaver County in Pennsylvania. Duquesne Light is also an electric distribution company (“EDC”) and a default service provider as those terms are defined under Section 2803 of the Public Utility Code. 66 Pa. C.S. § 2803.

2. Duquesne Light owns approximately 690 miles of transmission lines operating at 69kV, 138kV, and 345kV, and approximately 7,200 miles of distribution lines operating at less than 69kV. Duquesne Light’s transmission facilities are presently operated subject to the functional control of PJM Interconnection LLC (“PJM”).

3. Duquesne Light's business address is as follows:

Duquesne Light Company
411 Seventh Avenue
Pittsburgh, PA 15219

4. Duquesne Light's attorney in this matter is:

Emily M. Farah (Pa. I.D. No. 322559)
Duquesne Light Company
411 Seventh Avenue, Mail Drop 15-7
Pittsburgh, PA 15219
Phone: 412-393-6431
E-mail: efarah@duqlight.com

Duquesne Light's attorney is authorized to electronically receive all notices and communications regarding this filing. Further, counsel for Duquesne Light consents to the service of documents by electronic mail at the above e-mail address, pursuant to 52 Pa. Code § 1.54(b)(3).

5. This Letter of Notification includes the following accompanying attachments:

- Attachment 1 – CONFIDENTIAL Aerial Map of Existing Facilities
- Attachment 2 – CONFIDENTIAL Aerial Map of Proposed Facilities
- Attachment 3 – Typical Cross Sections of Proposed 138kV Facilities
- Attachment 4 – Design Criteria and Safety Practices
- Attachment 5 – List of Impacted Property Owners

6. Attachments 1 and 2 show critical energy infrastructure information regarding the bulk transmission system of Duquesne Light located within its certificated service territory in Pennsylvania. Duquesne Light is therefore submitting CONFIDENTIAL versions of Attachments 1 and 2.

7. This Letter of Notification and accompanying Attachments, which are incorporated herein by reference, contain all the information required by 52 Pa. Code §57.72(d)(4).

III. GENERAL DESCRIPTION OF THE PROJECT

A. PROJECT NEED

8. Duquesne Light adopted reliability and planning standards to ensure adequate and appropriate levels of electric service to its customers consistent with good utility practice. Duquesne Light's reliability and planning standards were developed from and are consistent with the North American Electric Reliability Corporation ("NERC") and PJM

mandatory reliability standards.²

9. Recent landslide activity in close proximity to existing double circuit lattice towers 3640, 3641, 3642, and 3643 on 138kV circuits Z-71 Carson to Dravosburg and Z-88 Carson to Bettis have prompted a new geologic assessment of the landslide susceptibility of the tower corridor.

10. Based on the geological assessment and the risk of further progression of the observed landslides or the formation of new landslides within the corridor could compromise the foundational stability of the existing towers.

11. As more fully described in Section D, below, the existing structures include steel lattice towers built in the 1950s. Each tower is on 4 grillage foundations, approximately 9 feet deep.

12. Ground and helicopter inspections in 2018 and 2019 revealed that the existing towers are vulnerable to future ground movement which may compromise their structural integrity.

13. New, relocated, transmission structures with deeper foundations will ensure continued safety and reliability of the Z-71 and Z-88 138kV circuits and make the Z-71 and Z-88 circuits more resilient against landslide-related hazards.

14. The Project area will extend approximately 0.7 miles between the Carson-Bettis substation and Carson-Dravosburg South substation.

15. In summary, the Project is necessary to mitigate and prevent the risk of damage to the Company's electrical infrastructure in a landslide-prone corridor.

² Duquesne Light's reliability and planning standards are set forth in the FERC Form No.715 annual report and is posted on PJM's website: <https://www.pjm.com/planning/planning-criteria/to-planning-criteria>.

16. There is currently no pending litigation regarding the right-of-way or environmental matters related to this Project.

B. PROJECT COST AND TIMELINE

17. The estimated cost of the Project is approximately \$6.4 to \$12.0 million³ dollars, to be borne entirely by the Company.

18. Subject to Commission approval, construction of the Project is scheduled to begin September 2022, with scheduled in-service by September 2023.

19. If approved, the Project will require intermittent transmission outages throughout Project construction, but does not require distribution outages. Therefore, Project construction will not result in outages for any customers.

C. GENERAL DESCRIPTION OF THE PROJECT

20. The Transmission Z-71 and Z-88 Tower Replacement Project involves removing and replacing 138kV structures. These removals and replacements will improve the reliability of the corridor by increasing its resilience against landslides.

21. The Project will not increase the voltage of the existing Z-71 and Z-88 transmission circuits. The Project will be designed, constructed, and operated at 138kV.

22. The Project area is located between existing structures 3653 and structure 3638, and is approximately 0.7 miles in length. The proposed Project will not increase the length of the line by more than 50 feet. See Attachment 2.

23. 9 existing structures are affected by the proposed Project. 4 structures will be removed entirely without replacement. 5 existing structures will be replaced. Of the 5 new structures, 3 will be new two-pole structures and 2 will be new single-monopole structures.

³ All costs for the Project are associated with transmission upgrades. No portion of the Project is related to distribution facilities.

24. The Project proposes replacing 3 existing double circuit lattice towers with 3 new two-pole weathered steel structures on deep concrete foundations, replacing 2 existing single-circuit lattice structures with 2 new weathered steel single monopole structures on deep concrete foundations, and removing 4 existing structures.

25. Existing structures 3640, 3641, and 3643 will be replaced with 3 weathered steel, 2-pole structures on deep concrete foundations with 3 795 kcmil aluminum conductor steel reinforced (“ACSR”) 26/7 ACSR conductors and 1 7/8 alumoweld shield wire with the same conductor.

26. Existing structures 3642, 3657-1, 3657-2, and 3657-3 will be removed entirely without replacement.

27. Existing structures 3656 and 3657 will be replaced with weathered steel, single monopoles on deep concrete foundations with 3 795 kcmil aluminum conductor steel reinforced 26/7 ACSR conductors and 1 5/16” alumoweld shield wire with the same conductor.

28. Transmission structures for this Project will be analyzed as required pursuant to the structural loading and clearance requirements of the National Electric Safety Code (“NESC”), 2017 Edition.

29. Duquesne Light surpasses the NESC standards for conductor clearance requirements. Duquesne Light designs 138 kV and 345kV transmission lines to meet 30 feet of ground clearance under the worst-case load scenario, 9.4 feet more than the NESC minimum of 20.6 feet for new construction on 138kV. See Attachment 4.

30. Most of the replacement structures will be located within the existing alignment. To avoid future landslide events, some replacement structures will be shifted

approximately 150-400 feet from the existing transmission line alignment. As set forth in Section E, below, new right-of-way and/or property right agreements will be or have been obtained for the replacement structures that will not be installed within existing Duquesne Light right-of-way.

31. In order to accommodate the reduced angle and alignment shift associated with the Project, approximately 100 feet of additional aerial rights-of-way width have been obtained for approximately 1,750 linear feet.

32. The average height of the new structures is approximately 110 feet, and the average height of the existing towers is approximately 89 feet. The slightly increased structure height is a by-product of removing 4 structures and in turn increasing the span lengths between structures. Increasing the span between the towers is necessary to avoid the landslide-prone area. See Attachment 2.

D. THE PROPOSED PROJECT

33. By way of this filing, Duquesne Light is seeking Commission approval for work on 9 existing transmission structures within a 0.7 mile span between existing structures 3653 (northern end of the Project area) and structure 3638⁴ (southern end of the Project area). See Attachments 1-2.

34. The 9 structures located within the Project area include: 3640, 3641, 3642, 3643, 3656, 3657, 3657-1, and 3657-2, and 3657-3. Work at each structure location is described in the following paragraphs.

35. Existing structure 3640 is a double circuit lattice tower with four grillage foundations and is approximately 102 feet tall. Existing structure 3640 will be removed and

⁴ Existing structure 3638 will remain in place. Existing structure 3638 is double circuit lattice tower with four grillage foundations and approximately 90 feet tall.

replaced with a new two-pole, weathered steel structure on deep concrete foundations (Structure 7066), and relocated approximately 380 feet to the southwest to a new position out of the landslide affected area. Structure 7066 will be approximately 100 feet tall.

36. Existing structure 3641 is a double circuit lattice tower with four grillage foundations, approximately 97 feet tall. Existing structure 3641 will be removed and replaced with a new two-pole, weathered steel structure (Structure 7067) on deep concrete foundations and relocated approximately 20 feet from the existing location. Structure 7067 will be approximately 135 feet tall.

37. Existing structure 3642 is a double circuit lattice tower with four grillage foundations approximately 124 feet tall. Existing structure 3642 will be removed entirely without replacement. The new conductor will span over the removed structure location.

38. Existing structure 3643 is a double circuit lattice tower with 4 grillage foundations, approximately 117 feet tall. Existing structure 3643 will be removed and replaced with a new two-pole, weathered steel structure (Structure 7068) on deep concrete foundations and relocated approximately 160 feet to the south along the existing right of way. Structure 7068 will be approximately 135 feet tall.

39. Existing structure 3656 is a double circuit lattice H-Frame style structure, approximately 55 feet tall. Existing structure 3656 will be removed and replaced with a double circuit, weathered steel single monopole on a deep concrete foundation (Structure 7065) and relocated approximately 20 feet from the existing location. Structure 7065 will be approximately 80 feet tall.

40. Existing structure 3657 is a double circuit lattice H-Frame style structure, approximately 55 feet tall. Existing structure 3657 will be removed and replaced with a

single circuit, weathered steel single monopole (Structure 7064) on a deep concrete foundation and relocated approximately 20 feet from the existing location. Structure 7064 will be approximately 100 feet tall.

41. Existing structure 3657-1 is a single circuit monopole structure, approximately 90 feet tall. Existing structure 3657-1 will be removed entirely without replacement.

42. Existing structure 3657-2 is a single circuit monopole structure, approximately 75 feet tall. Existing structure 3657-2 will be removed entirely without replacement.

43. Existing structure 3657-3 is a single circuit monopole structure, approximately 90 feet tall. Existing structure 3657-3 will be removed entirely without replacement.

44. The 5 existing double circuit lattice towers (3640, 3641, 3642, 3643, 3656) each have 4 grillage foundations that encompass a footprint of approximately 20 feet by 20 feet to approximately 30 feet by 30 feet on the ground surface.

45. The replacement steel structures (7066, 7067, 7068) will each be installed on a single concrete pier foundation (per pole) ranging from approximately 8 feet to 10 feet in diameter.

46. The existing transmission conductors spanning from existing structures 3643 to 3640 are 3-795 kcmil aluminum conductor steel reinforced (“ACSR”) 26/7 ACSR conductors.

47. The existing transmission conductors spanning from existing structures 3640 to 3638 and 3-853.7 kcmil aluminum conductor aluminum reinforced (“ACAR”) 24/13

ACAR.

48. The Project proposes reconductoring both circuits in the 0.7 Project area with 6 new 795 kcmil ACSR 26/7 conductors and 2 new 7#8 alumoweld shield wires. The voltage for both circuits will remain 138kV.

49. In summary, 9 structures are affected by the proposed Project. 4 structures will be removed entirely without replacement. 5 existing structures will be replaced. Of the 5 new structures, 3 will be new two-pole structures and 2 will be new single-monopole structures.

50. Subject to Commission approval, construction of the Project is scheduled to begin in September 2022 in order to stabilize impacted structures and avoid future damage from potential future landslide activity.

E. DESCRIPTION OF RIGHTS-OF-WAY

51. All necessary rights-of-way will be or have been obtained for the Project. Replacement structures will be located within the existing rights-of-way when possible.⁵

52. Replacement structures 7064, 7065, and 7067 will be situated approximately 20 feet from the existing structures, within existing rights-of-way.

53. Structure 7066 will be shifted approximately 380 feet to the southwest along the alignment.

54. Structure 7068 will be shifted approximately 160 feet to the south along the alignment.

55. The blowout for the conductors on the replacement towers will be designed with the same design criteria as the existing conductors. A cross sectional diagram showing

⁵ The new and existing rights-of-way are not defined-width easements.

typical arrangements of the two circuits is provided in Attachment 3.

56. Duquesne Light has secured 10 of the 12 right-of-way agreements or property rights necessary for the Project. Of the 12 right-of-way agreements, 8 are aerial rights-of-way agreements.

57. Duquesne Light has obtained 8 new aerial rights-of-way to accommodate the change in alignment between new structures 7066 and 7067 of approximately 1,750 linear feet. All other existing rights-of-way will remain.

58. The centerline of the new aerial right-of-way is located approximately 100 feet north of the centerline for the previous aerial right-of-way. See Attachments 1-2.

59. No new structures will be located within the new aerial rights-of-way, only aerial cable crossing. Additionally, the proposed conductor displacement/blowout will not exceed the width of the aerial right-of-way. See Attachment 2.

F. HEALTH AND SAFETY

60. The Project will not create any unreasonable risk of danger to public health or safety.

61. The Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable NESC minimum standards. The Project will also conform to Duquesne Light's design criteria, construction standards, and safety practices. See Attachment 4.

62. The Project is not expected to have any impact on pipelines, other utilities, or telecommunications.

63. The proposed Project will not impact existing conductor thermal ratings.⁶

64. There are no airports located within 2 miles of the Project area. See 52 Pa. Code § 57.72(c)(9). The nearest airport to the Project area is the Allegheny County Airport, which is approximately 4.5 miles from the Project Area. Duquesne Light will submit the Federal Aviation Administration (“FAA”) applications as necessary and will comply with relevant requirements.

65. Duquesne Light’s vegetation management practices are based on maintenance rights acquired, voltage of the line involved, proximity of the trees to the facilities, and the species and condition of trees involved.

66. Duquesne Light will acquire National Pollutant Discharge Elimination System (“NPDES”) permit(s) for earth disturbance activities in accordance with Pa. Code Chapter 102 and will comply with the permit conditions placed on those approvals. Duquesne Light will develop an Erosion and Sedimentation Control Plan (“ESCP”) and a Post Construction Stormwater Management / Site Restoration (“PCSM/SR”) Plan as required by the NPDES and Pennsylvania Code.

67. Duquesne Light will review impacts of any unique geological, scenic, or natural areas within the Project. Duquesne Light will also review any impacts on state lands, national parks, state parks, or local parks within the Project area.

68. Duquesne Light has coordinated, and will continue to coordinate, the Project with the Pennsylvania State Historic Preservation Office (“PA SHPO”), as necessary, to

⁶To calculate thermal ratings, Duquesne Light utilizes industry standards and PLS-CADD software to determine overhead conductor ratings. The PLS-CADD software and DLC overhead conductor rating methodology, rely upon Institute of Electrical and Electronics Engineers (“IEEE”) Standard for Calculating the Current-Temperature of Bare Overhead Conductors,” IEEE 738 (versions 1993 and 2006), as the primary reference in developing ampacity ratings for overhead conductors.

determine whether the project will have any effects on cultural resources. Duquesne Light will comply with any surveys or conditions required by the PA SHPO.

69. Duquesne Light will complete a Wetland Delineation and Stream Identification and Report (“WDR”) for the project to identify potential impacts to environmental resources. Temporary access roads and work areas will be selected to reduce impacts to environmental resources to the maximum extent practicable. Where impacts to environmental resources cannot be reduced, they will be permitted in accordance with the regulations under Pa. Code Chapter 105. One wetland will be affected by the access roads. The results of a Pennsylvania Natural Diversity Inventory (“PNDI”) investigation indicated that no further review is required by the PA Game Commission, PA Department of Conservation and Natural Resources, PA Fish and Boat Commission, or U.S. Fish and Wildlife Service.

70. Duquesne Light has completed a desktop review of Pennsylvania Natural Heritage Program (“PNHP”) Core Habitat data for the Project area as part of the waters of the U.S. delineation study. As part of the permit requirements for the Project, Duquesne Light has obtained a Pennsylvania Natural Diversity Inventory (“PNDI”) receipt that addressed habitat under the jurisdiction of the Pennsylvania Department of Conservation and Natural Resources (“DCNR”), the Pennsylvania Fish and Boat Commission (“PFBC”), the Pennsylvania Game Commission (“PGC”), and the U.S. Fish and Wildlife Service (“USFWS”). Based on the results of the PNDI review, Duquesne Light has undertaken regulatory review with the above-listed agencies, as required.

G. NOTICE

71. Duquesne Light has provided information regarding the Project to

representatives of the Town of Arlington located in the City of Pittsburgh and Baldwin Borough in Allegheny County.

72. Copies of this Letter of Notification will be served on the governmental agencies, municipalities, and other public entities agencies in accordance with 52 Pa. Code § 57.72(d)(3) and 52 Pa. Code § 57.74.

73. All landowners potentially impacted by the construction of the replacement structures and subsequent removal of the existing impacted structures will receive a copy of this filing. Damages, if any, would be restored.

H. LETTER OF NOTIFICATION

74. Duquesne Light is proceeding by means of a Letter of Notification, instead of a full transmission siting Application, pursuant to the Commission's regulation at 52 Pa. Code § 57.72(d)(1)(vi) (allowing LONs when the proposed route is 2 miles or less).

75. The Project involves the replacement and reconductoring of 9 existing tower structures along a 0.7 mile portion of the existing 138kV Z-71 and Z-88 transmission circuits, which run parallel to one another.

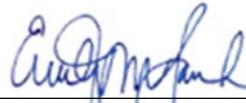
76. The length of the Z-71 and Z-88 transmission circuits will not be changed by more than 50 feet, if the Project is approved.

77. By way of this filing, Duquesne Light Company requests that this Commission review and, by order, approve or disapprove the present Letter of Notification. Subject to Commission approval, the Project shall be located and constructed without the full line siting application process as set forth in this subchapter. If the Commission does not approve the letter of notification, its order shall direct the Company to comply with the application process set forth in 52 Pa. Code § 57.72.

IV. CONCLUSION

WHEREFORE, in consideration of the foregoing, Duquesne Light respectfully requests that the Pennsylvania Public Utility Commission grant Duquesne Light Company approval to proceed with the replacement of the impacted structures on the Z-71 and Z-88 circuits on the approximate 0.7 mile Project area as described in this Letter of Notification.

Respectfully submitted,



Emily M. Farah (Pa. I.D. No. 322559)
Duquesne Light Company
411 Seventh Avenue, Mail Drop 15-7
Pittsburgh, PA 15219
Phone: 412-393-6431
Fax: 412-393-5757
E-mail: efarah@duqlight.com

Counsel for Duquesne Light Company

DATE: January 11, 2022

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Letter of Notification of Duquesne Light :
Company, Filed Pursuant to 52 Pa. Code :
Chapter 57 Subchapter G, for Approval to :
Replace and Relocate Towers on the Z-71 and : Docket No. A-2022-_____
Z-88 138kV Circuits to Mitigate and Prevent :
Landslide Damage in the Town of Arlington, :
and Baldwin Borough, Allegheny County, PA. :

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the Application and Exhibits upon the participants listed below in accordance with the requirements of 52 Pa. Code § 57.74(b) (relating to service of copies):

**VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

City of Pittsburgh Planning Commission
200 Ross St., Civic Bldg, Third Fl.
Pittsburgh, PA 15219

Allegheny County Planning Dept.
One Chatham Center, Suite 900
112 Washington Pl.
Pittsburgh, PA 15219

Norfolk Southern
4600 Deer Path Rd., Suite 202
Harrisburg, PA 17110

Anthony Arnold
5646 Willow Terrace Dr.
Bethel Park, PA 15102

KBM Management, LLC
998 Becks Run Rd.
Pittsburgh, PA 15210

Department of Environmental Resources
Attn: Bureau of Environmental Planning;
400 Waterfront Drive
Pittsburgh, PA 15222

Baldwin Borough Planning Department
Municipal Complex
3344 Churchview Ave.,
Pittsburgh, PA 15227

William Mullins
1006 Becks Run Rd.
Pittsburgh, PA 15210

KBM Management LLC
1000 Becks Run Rd.
Pittsburgh, PA 15210

Norma & Ruth Yeager
987 Beck Run Rd.
Pittsburgh, PA 15210

Community Specialist Corporation
900 Agnew Rd.
Pittsburgh, PA 15227

Peoples Natural Gas
Office of the President
375 N Shore Dr.
Pittsburgh, PA 15212

Pennsylvania American Water
Office of the President
852 Wesley Drive
Mechanicsburg, PA 17055

Edward Palumbo
995 Becks Run Rd.
Pittsburgh, PA 15210

Housing Authority, City of Pittsburgh
200 Ross St., Fl. 10
Pittsburgh, PA 15219

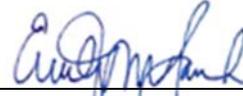
Pittsburgh Water and Sewer Authority
Office of the President
1200 Penn Ave.
Pittsburgh, PA 15222

Columbia Gas of Pennsylvania
Office of the President
121 Champion Way
Canonsburg, PA 15317

Arthur Perdios
991 Becks Run Rd.
Pittsburgh, PA 15210

Urban Redevelopment Authority, City of Pittsburgh
200 Ross St., Fl. 10
Pittsburgh, PA 15219

William Mullins
2028 Stewart Rd., Lot 61
Melbourne, FL 32935



Emily M. Farah (Pa. I.D. No. 322559)
Duquesne Light Company
411 Seventh Avenue, Mail Drop 15-7
Pittsburgh, PA 15219
Phone: 412-393-6431
E-mail: efarah@duqlight.com

Counsel for Duquesne Light Company

Date: January 11, 2022

VERIFICATION

I, MEENAH SHYU, PE, being the GENERAL MANAGER of ENGINEERING at Duquesne Light Company hereby state that the facts set forth above are true and correct to the best of my knowledge, information and belief; that I expect Duquesne Light Company to be able to prove the same at the time of a hearing held in this matter. I understand the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Date: 01/06/2022



Meenah Shyu, PE

ATTACHMENT 1

CONFIDENTIAL

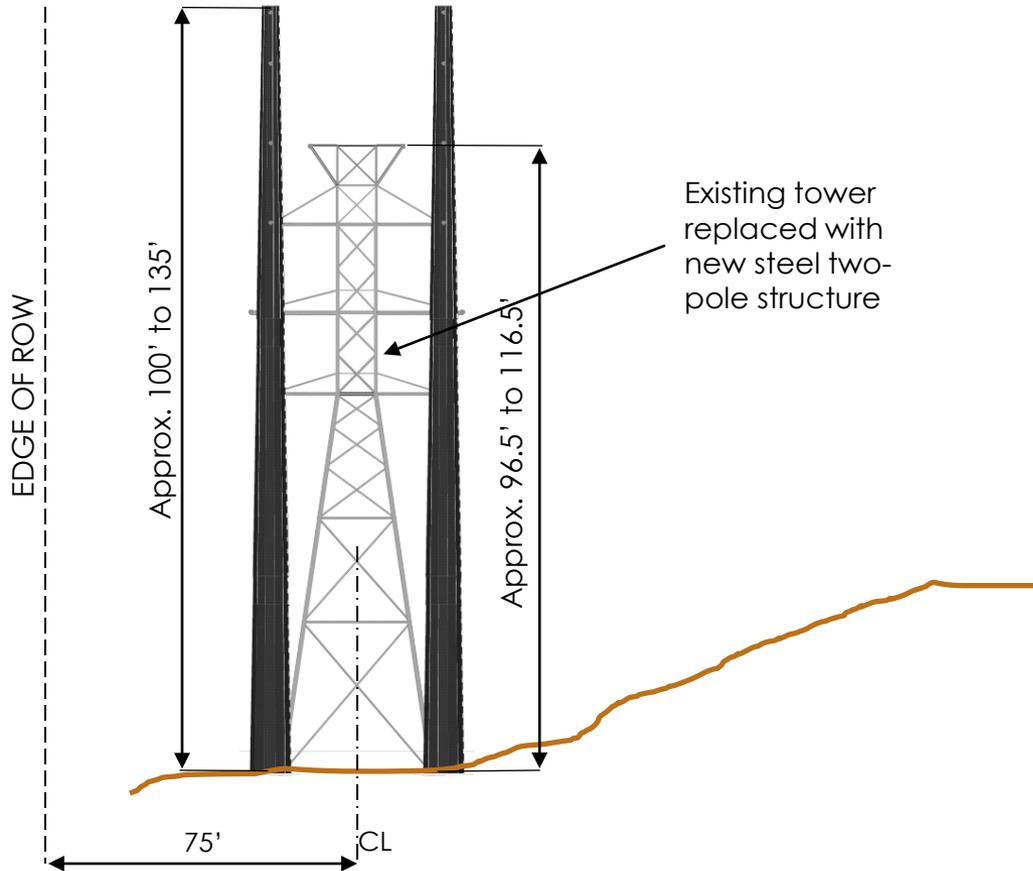
ATTACHMENT 2

CONFIDENTIAL

ATTACHMENT 3

ATTACHMENT 3 TYPICAL CROSS SECTION 1/2

Existing	Z-71 & Z-88 3640, 3641 and 3643
Proposed	7066, 7067 and 7068



**TYPICAL CROSS SECTION 1
EXISTING AND PROPOSED**



Project Location
Town of Arlington
Allegheny County, PA

198803174
Prepared by FG on 02/13/2020
Independent Review by ... on ...

Client/Project
Duquesne Light Company
Transmission Z-71 and Z-88 Tower Replacement

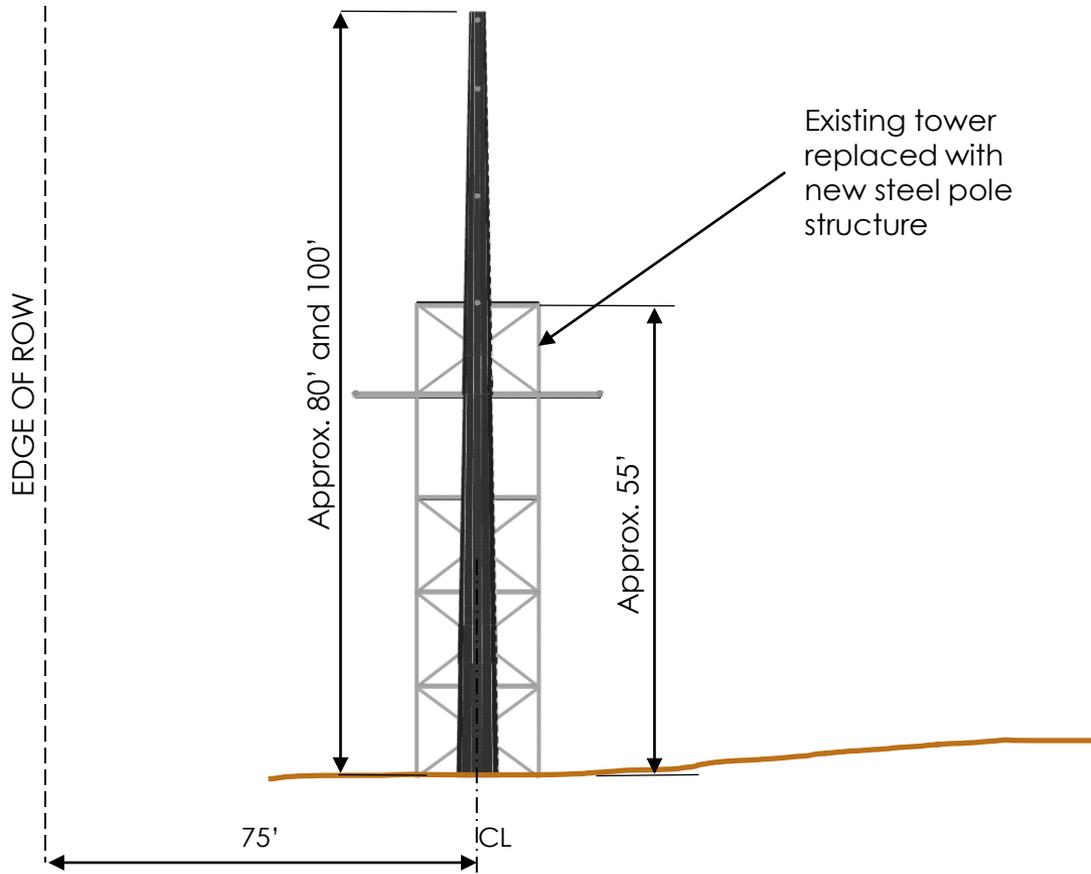
Attachment

3

Title
TYPICAL CROSS SECTION 1/2

ATTACHMENT 3 TYPICAL CROSS SECTION 2/2

Existing	Z-71 & Z-88 3656 and 3657
Proposed	7064 and 7065



**TYPICAL CROSS SECTION 2
EXISTING AND PROPOSED**



Project Location
Town of Arlington
Allegheny County, PA

198803174
Prepared by FG on 02/13/2020
Independent Review by ... on ...

Client/Project
Duquesne Light Company
Transmission Z-71 and Z-88 Tower Replacement

Attachment

3

Title
TYPICAL CROSS SECTION 2/2

ATTACHMENT 4

ATTACHMENT 4
TRANSMISSION Z-71 AND Z-88 TOWER REPLACEMENT PROJECT
DUQUESNE LIGHT COMPANY DESIGN CRITERIA AND SAFETY PRACTICES

The National Electrical Safety Code (NESC) is a set of rules to safeguard people during the installation, operation, and maintenance of electric power lines. The NESC contains the basic provisions considered necessary for the safety of employees and the public. Although it is not intended as a design specification, its provisions establish minimum design requirements. Duquesne Light Company (“Duquesne Light”) has developed design specifications and safety rules which meet or surpass all provisions specified by the NESC.

Engineering Design Criteria and Parameters

The NESC includes loading requirements and clearances for the design, construction, and operation of power lines. The "loads" on conductors and supporting structures are the forces that develop from the weight of the conductors, the weight of ice on the conductors, plus wind pressure on the conductors and supporting structures. Loading requirements are the loads on the conductors and structures that are anticipated assuming certain ice and wind conditions. Loading requirements always contain "safety factors" to allow for unknown or unanticipated contingencies. The clearances and loading requirements contained in the NESC were developed to ensure public safety and welfare.

Duquesne Light transmission line design standards meet or surpass the NESC standards. For example, the relative order of grades of construction for conductors and supporting structures is B, C, and N; Grade B being the highest. According to the NESC standards, construction Grades B, C, or N may be used for transmission lines (except at crossings of railroad tracks and limited access highways where Grade B construction is specified). However, Duquesne Light designs all of its transmission lines for Grade B construction. The use of Grade B design and construction specifies such things as larger-minimum crossarm dimensions, larger-minimum conductor size, and increased safety factors.

Duquesne Light also surpasses the NESC standards in the clearance requirements. Duquesne Light designs 138 kV and 345kV transmission lines to meet 30 feet of ground clearance under the worst-case load scenario, 9.4 feet more than the NESC minimum of 20.6 feet for new construction on 138kV

transmission lines and 5.2 feet more than the NESC minimum of 24.8 feet for new construction on 345kV transmission lines. For reconductor projects and spans with new structures on 138kV and 345kV transmission lines, Duquesne Light strives to obtain either 30 feet of ground clearance or NESC+10%, modifying existing structures as necessary to meet these criteria. For all other types of clearances on new lines, NESC+10% is used.

Duquesne Light also surpasses the NESC standards in the structure overload or multiplying factors. The guideline for structural load factors for transmission structures can be found in the NESC Code. Duquesne Light applies overload factors of 1.1 for NESC 250C and NESC 250D loads compared to the NESC requirement of using 1.0 overload factors for NESC 250C and NESC 250D loads.

Periodic Maintenance Program on All Transmission Lines

Duquesne Light ensures the continued public safety from our transmission line infrastructure by implementing various maintenance and inspection programs. One program is the routine inspection of as-built conditions to meet clearance requirements described above through advanced surveying technology referred to as “LiDAR”. This technology allows Duquesne Light to model its transmission system three-dimensionally to analyze clearances from the conductors to the world around them, including vegetation, homes, pools, roads, and more. This program provides Duquesne Light with accurate as-built records to ensure compliance with designs while also identifying any new or changing conditions to surrounding landscape.

Other Duquesne Light Maintenance programs for inspected towers include:

- a. Ground inspections, performed by Duquesne Light mobile workers walking around the base of the structure, on approximately 350 structures annually. These inspections focus heavily on foundations, structure integrity, and failed hardware, though additional information may be noted.
- b. Aerial inspections, performed by a Duquesne Light subcontractor from a helicopter on approximately 500 structures annually. These inspections focus heavily on hardware and structural defects in tower members, though additional information may be noted.

Personnel Safety Rules

Duquesne Light follows OSHA regulations to ensure safe practices. These regulations are incorporated into the Duquesne Light employee Safety Handbook. Duquesne Light safety rules and good practices include the following:

1. Only qualified employees and trainees working under their direct supervision may work on or with exposed energized lines or parts of equipment operating at 50 volts or more, and must be familiar with the minimum approach distances as indicated by OSHA regulations.
2. Before work is commenced, a job briefing will be held with all employees to orient each employee as to:
 - a. The hazards associated with the job.
 - b. The work procedures involved.
 - c. Any special precautions to be taken.
 - d. All energy source controls.
 - e. Personal protective equipment required.
3. When working in elevated locations, above four feet, employees shall use appropriate fall protection systems. Each employee working from an aerial lift, bucket truck, or man lift shall use a full body harness and either a shock absorbing lanyard or self-retracting lanyard. Duquesne Light ensures that all fall protection follows the OSHA regulations.
4. Prior to climbing towers and other similar structures a documented visual inspection shall be conducted by a competent person to:
 - a. Determine type or work, materials, and construction methods required.
 - b. Determine whether ground access, without climbing a structure, is possible through use of access roads and bucket trucks.
 - c. Determine physical condition of the structure.
 - d. Contact Engineering to determine if a structural analysis has been performed to identify tie-off and anchorage points for construction activities.
 - e. Tie-off and anchorage points follow the OSHA regulations, in which the anchorage points can support 5,000 lbs per employee or a twice the impact load per employee.

- f. Determine the type of fall protection systems to be used, appropriate anchorage points and complete documented fall safety analysis. All work is to be inspected prior to construction to evaluate the site conditions. If there are any concerns about the integrity of a structure, Duquesne Light Engineering is engaged to perform the appropriate investigation and analysis to provide guidance for safely completing the job.

ATTACHMENT 5

NO.	COUNTY	PARCEL NO.	RECORD OWNER	PROPERTY ADDRESS	PROPERTY CITY	PROPERTY STATE	PROPERTY ZIP	TYPE OF WORK	DESCRIPTION
1	ALLEGHENY	0031-G-00052-0000-000	MULLINS, WILLIAM	1006 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
2	ALLEGHENY	0031-G-00040-0000-000	MULLINS, WILLIAM	1002 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
3	ALLEGHENY	0031-G-00045-0000-000	KBM MANAGEMENT LLC	1000 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
4	ALLEGHENY	0031-G-00066-0000-000	PALUMBO, EDWARD J	995 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
5	ALLEGHENY	0031-G-00063-0000-000	PERDIOS, ARTHUR	991 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
6	ALLEGHENY	0031-G-00059-0000-000	YEAGER, NORMA & RUTH	987 BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
7	ALLEGHENY	0031-F-00080-0000-000	ARNOLD, ANTHONY	BECKS RUN RD	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
8	ALLEGHENY	0031-G-00200-0001-00	URBAN RE-DEV. AUTH. OF PITTSBURGH	BECKS RUN RD, 877 BALDWIN BORO	PITTSBURGH	PA	15210	PERMANENT	AERIAL EASEMENT, COND. BLOWOUT
9	ALLEGHENY	0031-G-00200-0000-00	URBAN RE-DEV. AUTH. OF PITTSBURGH	AGNEW RD, 131 31ST WARD	PITTSBURGH	PA	15210	PERMANENT	ACCESS RD, SOUTH SIDE HELI LANDING
10	ALLEGHENY	0030-L-00380-0000-02	NORFOLK SOUTHERN	ROW, 116 16TH WARD	PITTSBURGH	PA	15210	PERMANENT	ALL STRS & ACCESS RD NORTH SIDE
11	ALLEGHENY	0031-G-00150-0009-00	NORFOLK SOUTHERN	ROW, 877 BALDWIN BORO	PITTSBURGH	PA	15210	PERMANENT	LOCATION OF EXISTING STR 3640
12	ALLEGHENY	0030-P-00001-0000-00	HOUSING AUTH., CITY OF PITTSBURGH	3006-3038 ARLINGTON AVE	PITTSBURGH	PA	15210	TEMPORARY	PROPOSED HELI LANDING NORTH SIDE
13	ALLEGHENY	0059-H-00040-0001-00	COMMUNITY SPECIALIST CORPORATION	900 AGNEW RD	PITTSBURGH	PA	15227	PERMANENT	ACCESS ROAD