

# Attachment 2

**ATTACHMENT 2**  
**MON-FAYETTE EXPRESSWAY PROJECT**  
**NECESSITY STATEMENT**

---

Duquesne Light Company (“Duquesne Light” or the “Company”) proposes to site, relocate, and rebuild portions of transmission electric facilities (the “Project”) affected by the Pennsylvania Turnpike Commission’s (“PTC”) Mon-Fayette Expressway (“MFE”) in West Mifflin Borough and the City of Duquesne, Allegheny County, Pennsylvania.

**I. Project Need**

The Project is required to relocate existing Duquesne Light transmission infrastructure to accommodate the MFE. The PTC will construct the next phase of the MFE, which will start in Jefferson Hills Borough and head northeast to the City of Duquesne, beginning in 2021. Duquesne Light’s electric transmission facilities present design conflicts with the MFE in five distinct areas of concern, or Study Areas. These Study Areas are described in further detail in Attachment 4, Siting Study. Affected facilities in the Study Areas include portions of the following Duquesne Light 138 kV electric transmission lines:

- Z-13 Wilson Substation to West Mifflin Substation
- Z-14 West Mifflin Substation to Wilson Substation
- Z-15 Dravosburg Substation to U.S.S Clariton Substation
- Z-57 Universal Substation to U.S.S. Illinois
- Z-72 Wilson Substation to Dravosburg Substation
- Z-73/Z-74 Dravosburg Substation to West Mifflin Substation
- Z-75 Dravosburg Substation to Elrama Substation

- Z-76/Z-77 Wilmerding Substation to Dravosburg Substation
- Z-78 Logans Ferry Substation to Dravosburg Substation
- Z-79 U.S.S. Illinois Substation to Dravosburg Substation
- Z-91 Rankin Substation to Dravosburg Substation

A map depicting Duquesne Light’s existing 138 kV facilities in each of the Study Areas, superimposed with the future MFE, is included as Appendix A. Facilities that pose conflicts with the MFE, and must be relocated accordingly, are described below.

### Study Area 1

The MFE design in Study Area 1 includes a tall bridge that will span over Camp Hollow Road and a valley. The roadway would cross existing circuits Z-13, Z-14, Z-15, Z-72, and 66162. The existing wires would not meet the National Electric Safety Code (“NESC”) minimum clearances to the proposed MFE bridge. The proposed bridge deck is approximately at the same elevation of the conductors during an everyday condition. Additionally, Towers 3225 and 3125 would fall within the proposed MFE highway design; and Towers 3025, 3025A, 3225, and 3125 would fall within the PTC’s construction or civil grading areas, and must be removed accordingly.

### Study Area 2

The MFE design in Study Area 2 includes a tall bridge that will span over a valley. The roadway would cross existing circuits Z-15, Z-72, Z-73, and Z-74. The existing wires would not meet the NESC minimum clearances to the MFE bridge. The MFE bridge deck is approximately at a higher elevation than the conductors at an everyday condition. Additionally, Towers 3008,

3108, 3208, and 3006 would fall within the PTC's limited access area, and the PTC will conduct civil grading in the area around Tower 3006. Those towers must be removed accordingly.

### Study Area 3

The MFE design in Study Area 3 includes a tall bridge that will span over a valley near Homeville Road. The roadway will cross existing circuits Z-76, Z-77, Z-78, Z-79, and Z-91. The existing wires of circuit Z-91 would not meet NESC minimum clearances to the MFE bridge. The proposed bridge deck is approximately at a higher elevation than the conductors on Structures 339819, 339820, and 339821. Additionally, towers 1149A and 1149B, and single wood pole structures 339802, 339803, 7322, 339804, 339807, 339808, 339809, 339116, 339817, 339818, and 339820 fall within the PTC's civil grading and/or limited access areas, and must be removed accordingly.

### Study Area 4

The MFE design in Study Area 4 includes a new connector road that will run adjacent to the Turnpike along Shady Lane and Commonwealth Avenue. This elevated road will cross existing circuit Z-91, whose wires will not meet NESC minimum clearances to the roadway at maximum operating temperature. Additionally, structures 339840, 315697, 339841, 339842, 339843, 339844, and 339845; towers 1149A and 1149B; and single wood pole structures 339802, 339803, 7322, 339804, 339807, 339808, 339809, 339116, 339817, 339818, and 339820 fall within the PTC's civil grading and/or limited access areas, and must be removed accordingly.

Study Area 5

The MFE highway in Study Area 5 will occupy the same corridor as the existing transmission circuits Z-57, Z-76, Z-77, Z-78, and Z-79, including a total of sixteen (16) existing towers and one (1) existing steel pole. An additional eighteen (18) existing towers in this corridor fall within the PTC's road construction and civil grading areas, and must be removed accordingly.

**II. Proposed Solution**

As discussed further in the Application, Attachment 4 (Siting Study), and Attachment 11 (Design Criteria, EMF Policy, and Safety Practices), Duquesne Light proposes to relocate and rebuild the affected transmission facilities so as to avoid interference with the MFE. This solution maintains the transmission lines' existing capacity.