

Noise is generated primarily from three sources within a substation: the transformers; the transformer cooling fans; and the control house air conditioning units. An “Environmental Sound Assessment Study” (“Noise Study”), which is attached to this Section 5 as Exhibit 5.6, was conducted by WMECO for the modifications to the Agawam and Ludlow Substations, among others. The Noise Study at Table 5-5 shows little, if any, increase in ambient noise levels due to the modifications at the Ludlow Substation.

5.4.2 Agawam Substation

Agawam is an existing substation with a 115-kV switchyard. The proposed modifications at this substation will include constructing a new 345-kV switchyard to interconnect two 345-kV lines, two 345/115-kV autotransformers, space provisions for future 345-kV connections, a new 115-kV circuit-breaker bay, and a new control house. The existing fencing at the substation will be relocated approximately 65 feet to the north and 45 feet to the west for a total expansion of 45,000 square feet.

All of the proposed modifications will be located on WMECO property. The substation expansion (i.e., outside of the existing fenceline) will occur in an area that currently consists of developed and landscaped areas. There are no wetlands, watercourses, vernal pools, or Protected Species habitats in the vicinity of the proposed modifications.

The impacts and mitigation for the Agawam Substation are expected to be comparable to those described for the Ludlow Substation. Aerial diagrams of the modifications to the Agawam Substation are set forth in Exhibit 5.8. These modifications would have generally minor and highly localized environmental effects.

The modifications proposed to the Agawam Substation would have a minor, incremental effect on visual resources. The new 345-kV facilities would not appreciably alter the existing appearance of the station. The new 345-kV line terminal structures would be approximately 120 feet tall, which is taller in height than the existing structures at the station.

The Noise Study (Exhibit 5.6) at Table 5-3 shows little, if any, increase in ambient noise levels due to the modifications at the Agawam Substation.

5.5 OVERHEAD CONSTRUCTION METHODS AND SCHEDULE

The proposed Project facilities will be constructed in accordance with established electric utility practices, best management practices, final engineering plans, WMECO’s specifications, and the conditions