

Statement in Support of Massachusetts Electric Company
Application to City of Amesbury Planning Board for Site Plan Review Approval for
Electric Substation Improvement Project at 9 Allenclaire Drive, Amesbury, Massachusetts

Massachusetts Electric Company (“MEC”) seeks site plan review approval from the Amesbury Planning Board (the “Board”) pursuant to Section XI.C of the Amesbury Zoning Ordinance (the “Zoning Ordinance”) in connection with the replacement, installation and/or construction of certain substation-related equipment and facilities (the “Project”) at MEC’s existing electric substation known as Hillside Avenue Substation #66 (the “Substation”) located at 9 Allenclaire Drive, Amesbury, Massachusetts.

I. Background, Purpose and Project Scope.

The Substation is located on an approximately 1.14-acre parcel of land that is owned and operated by MEC (the “Substation Property”).¹ The Substation Property is located in the Residence 8 (“R8”) zoning district and no overlay districts, and is surrounded by residential properties to the north, east and west and a transmission line corridor to the south.

The Substation has been in operation for over 50 years, and is currently comprised of a control building and various substation-related equipment and facilities (e.g., transformers, circuit breakers, switches, dead-end structures, etc.), all of which are secured by a chain link fence that is 7 feet tall topped with 1 foot of barbed wire. MEC has determined that the replacement, installation and/or construction of certain substation-related equipment and facilities is necessary to improve the overall capacity and reliability of electric service for the City.

The Project involves the replacement, installation and/or construction of certain substation-related equipment and facilities, which include the following primary components: 1. an approximately 10,500 square foot expansion of the substation yard to accommodate the construction and/or installation of new substation-related equipment and facilities, including, but not limited to, an approximately 28’ x 55’ control building (i.e., 1,540 square feet), transformers, circuit breakers, feeders, switches and associated support structures and foundations; 2. replacement of all fencing and expansion with chain link fencing having a height of 8 feet plus 1 foot of barbed wire with gates; 3. installation of two gravel access roads and gravel pads, crushed stone fill, duct banks, ground grid and lighting poles and fixtures; 4. planting of trees and other landscape screening along property lines; 5. removal of existing equipment and facilities; and 6. excavation, grading and clearing of trees and other vegetation.

II. Requirement for Site Plan Review.

Sections XI.C and V.D Table of Use Regulations of the Zoning Ordinance require site plan review for any Limited Public Utilities use. The Project involves an approximately 10,500 square foot expansion of the substation yard, and, therefore, site plan review approval is required from the Board. The Project requires a waiver from the Board from the 25-foot continuous landscape buffer requirement, along with any other applicable waivers.

¹ The Substation Property is shown on Assessor’s Map 76, Lot #58.

In addition, the Project requires an order of conditions from the Amesbury Conservation Commission, a fence permit from the Amesbury Board of Fence Viewers. A stormwater permit may also be required from the Board pursuant to Section 398-6 of the City of Amesbury Code, and to the extent applicable a separate application will be filed.

III. Reasons for Site Plan Review Approval.

The Board should approve the proposed site plan and applicable waivers for the reasons set forth below.

A. Compliance with Development and Performance Standards.

Except as provided herein, the Project will comply with the Development and Performance Standards set forth in Section XI.C.8 of the Zoning Ordinance.

1. Access and Traffic Impacts. Access to and from the Substation Property along Allenclaire Drive will be slightly modified to include a second access drive that will allow vehicles to safely access both sides of the Substation. The additional access will continue to provide for safe and effective flow of traffic to and from the Substation Property, which is limited to service vehicles visiting the site to perform routine inspections, testing and equipment maintenance, as necessary. The Project will not result in a nuisance or hazard to vehicles or pedestrians within or off the Substation Property. The Project will not create any line-of-sight hazards along streets. Because the Substation will continue to be an unmanned electric substation facility and closed to the public, the Project will not result in increases in traffic volumes or negative impacts on adjacent streets and ways. Convenient, safe and adequate access for firefighting and emergency vehicles will continue to be provided up to the Substation gate.

2. Off-Street Parking and Loading. There are no designated parking or loading spaces at the Substation due to the specialized vehicles that come to the site that do not require conventional, designated parking spaces, the unique nature of the substation equipment and layout within the substation yard which limits areas for parking and the limited visitations to the site for routine inspections, testing and equipment maintenance, as necessary. Unlike other properties and uses in the zoning district and elsewhere, MEC and the Project must comply with electrical safety, security and clearance requirements (e.g., setbacks from buildings, equipment, facilities, fencing and property lines), standards and codes, including, but not limited to, the National Electric Safety Code, which substantially limits the developable area for the Project control building, equipment and facilities, the existing equipment, the driveways and overhead lines and structures.

This is an unmanned electric substation with unique vehicles and limited parking needs. While public utility use under Section VIII Table of Off-Street Parking Regulations requires 1 parking space per 1,000 square feet of gross floor area for uses other than office,² this minimum parking space requirement is not intended to apply to unmanned substation facilities, and the site is otherwise pre-existing nonconforming with respect to parking and loading. The substation yard will continue to be adequate for any parking and loading needs for the substation use. Snow will be stored along the driveway and side and rear lot lines of the Substation Property.

² No office use is proposed.

3. Preservation of Improvement to Landscaping. To the extent practicable, the Project has been designed to limit the amount of earth disturbance, cut and fill volumes and tree and vegetative clearing. No stone walls are contemplated to be removed under the Project, and no wetland vegetation will be displaced. Except for the removal of trees and vegetation to accommodate the expanded substation yard and installation of new plantings along the front and sides of the Substation Property, the natural features of the site located outside of the Substation fence line will largely remain undisturbed, and will be compatible with the neighborhood. There are no notable natural terrain features or scenic views or landscapes at the Substation Property, and the Project will not obstruct any views of same from publicly accessible locations or otherwise.

4. Site Plan and Architectural Design. The size, type, design, color, height, materials and location of the Project are consistent with industry and company standards, designs and practices applicable to electric substation facilities, and will adequately provide for all proposed and appropriate operations of the public utility use. The Substation Property is not within an historic district, contains no historic or cultural features, landmarks or designations and is not listed in the Massachusetts Cultural Resource Information System (MACRIS), the Inventory of Historic Assets of the Commonwealth, the National Register of Historic Places or the State Register of Historic Places.

5. Stormwater Runoff and Erosion Control; Water Quality. There will be no increase of volume or rate of surface water runoff to neighboring properties and streets, and downstream properties, water courses, channels and conduits will not be affected by stormwater runoff as a result of the Project. The addition of crushed stone fill at select locations as shown in the project plans will consist of 3-4-inch of crushed stone, as is used currently in the existing Substation yard. This crushed stone surface treatment promotes the infiltration of stormwater, enhances water quality and diminishes overland flow velocities while dissipating concentrated flows. In addition to the proposed 3-4-inch crushed stone yard surface, the Project is also proposing two shallow depressions, similar to those existing at the property. vegetated infiltration basins. These proposed stormwater management features will attenuate peak flows for the prerequisite storm events as well as provide in excess of the minimum required storage, infiltration and water quality. For details and calculations, see the submitted stormwater report and supporting materials.

The design elements of the Project are consistent with the protection of groundwater quality and quantity. The Project use is not noxious, harmful or hazardous, will not involve the storage or generation of hazardous materials or wastes and will have no harmful or negative effects pertaining to pollution of surface water, waterways or groundwater. The Project will not negatively affect any public water, sewer or storm drainage systems. Both during and after the construction of the Project, the Substation will result in zero reduction to the groundwater yield.

During construction, stormwater on the site will be controlled using approved erosion and sedimentation perimeter controls. Erosion and sedimentation controls on the site will utilize additional BMPs as set forth in MEC's Best Management Practices Manual for Massachusetts, including perimeter controls, a stabilized construction entrance, and stockpile stabilization. MEC intends to address construction-period impacts to the extent practicable using standard construction mitigation. The proposed design will prevent pollution of and degradation to surface water and

groundwater, minimize erosion and sedimentation, prevent changes in groundwater levels and limit the potential for flooding. No sensitive environmental resources will be impacted.

6. Hazardous Materials and Explosive Materials. No hazardous wastes or explosive materials will be generated or disposed of on site. However, the power transformers will continue to use mineral oil dielectric fluid (MODF) for insulation and cooling in the ordinary course of their operation. Although MODF is not listed as a hazardous material, it is hydrocarbon based. The transformers are equipped with secondary containment to protect against leaks. The Project is not located in a floodplain, Water Resource Protection District, aquifer protection zone or other environmentally sensitive area.

7. Lighting. There will be no deleterious effect on neighboring properties as a result of the proposed lighting for the Project. The proposed lighting will not result in any increase in impacts with respect to light or glare that would be noticeable by any abutting properties. This outdoor lighting will be mounted at heights that are sufficient and adequate for security and safety purposes and will be installed and directed in a downwards angle towards the substation equipment and facilities, and away from neighboring properties, and, therefore, compatible, and in harmony with, the surrounding properties. All proposed new lighting will be located a significant distance from the nearest public way, and will comply with the City's standards. Minimal lighting may be left on overnight for safety and to deter trespassing.

8. Environmental Performance Standards. The Project will be in harmony with the general purpose and intent of the Zoning Ordinance, and will not create a nuisance, hazard, congestion or concerns pertaining to health, safety or general welfare. The Project will not result in any emission of odorous gasses, solid or liquid particles, dangerous radioactivity and any emissions from the Substation use will be effectively confined to the premises. The Substation has existed at the site for decades, and there will not be substantial harm to the neighborhood or derogation from the purpose and intent of the Zoning Ordinance as a result of the Project.

9. Noise. The Project will not result in excessive noise and will not exceed the maximum permissible sound pressure at the property line.

10. Utilities. Given the unique and utilitarian nature of the Substation and distribution lines associated therewith, the electric facilities, equipment and lines will continue to be placed both aboveground and underground.

11. Roadways and Sidewalks. The Project will not require new connections or tie-ins to any public water, sewer or storm drainage systems or roadway infrastructure, and, given that the Substation will continue to be an unmanned facility, there will be no increases in traffic congestion, strains on parking or undue concentrations of the population. Based on the foregoing, no off-site improvements are proposed for public roads, sidewalks or other municipal facilities.

12. Specific Design and Construction Standards. To the extent applicable and practicable, construction specifications will comply with the standards in the Amesbury Subdivision Rules and Regulations, Massachusetts Highway Standards and/or standard engineering practices. Low Impact Development strategies for managing stormwater will be in

accordance with standards promulgated by Massachusetts Department of Environmental Protection and any design manuals produced by the Amesbury Department of Public Works.

- B. The Site Plan minimizes traffic and safety impacts of the proposed development on adjacent highways or roads, and maximizes the convenience and safety of vehicular and pedestrian movement with the site.

The Project will not result in a nuisance or hazard to vehicles or pedestrians within or off the Substation Property. The Project will not create any line-of-sight hazards along streets. The Substation will continue to be unmanned with limited vehicle trips to and from the Property, and, therefore, there will be little to no traffic impacts on Allenclair Drive. Because the Substation will continue to be an unmanned electric substation facility and closed to the public, the Project will not result in increases in traffic volumes or negative impacts on adjacent streets and ways. Traffic generated by the Substation will continue to be limited to service vehicles visiting the site to perform routine inspections, testing and equipment maintenance, as necessary. Convenient, safe and adequate access for firefighting and emergency vehicles will continue to be provided up to the Substation gate.

- C. The proposed development, to the extent feasible: (a) is integrated into the existing landscape; (b) minimizes adverse environmental impacts on such features as wetlands, floodplains, and aquifer recharge areas; (c) minimizes obstruction of scenic views from publicly accessible locations; (d) preserves unique natural or historical features; (e) minimizes tree, vegetation and soil removal and grade changes; (f) maximizes open space retention; (g) screens objectionable features from neighboring properties and roadway; and (h) minimizes noise and odors associated with commercial/industrial activities.

The Project will be located a significant and safe distance from the public way and property lines and visually screened from to the extent practicable by the existing substation facilities, dense vegetation and opaque fencing on neighboring properties, along with proposed new landscape screening and buffers along the front and side yards and new taller security fencing with tightly woven chain-link with small mesh openings of 1-inch along the side and rear yards.

The Project is not located in a floodplain, Water Resource Protection District, aquifer protection zone or other environmentally sensitive areas. The Substation Property is not within an historic district, contains no historic or cultural features, landmarks or designations and is not listed in the Massachusetts Cultural Resource Information System (MACRIS), the Inventory of Historic Assets of the Commonwealth, the National Register of Historic Places or the State Register of Historic Places. Tree, vegetation and soil removal and grade changes will be minimized to the extent practicable. The Project will be in harmony with the general purpose and intent of the Zoning Ordinance, and will not create a nuisance, hazard, congestion or concerns pertaining to health, safety or general welfare. The Project will not result in excessive noise or odors, and will not exceed the maximum permissible sound pressure at the property line.

- D. The architectural design of the proposed development is in harmony with the vernacular architecture of the City.

The size, type, design, color, height, materials and location of the proposed control building, equipment and facilities are consistent with industry and company standards, designs and practices applicable to electric substation facilities, and will adequately provide for all proposed and appropriate operations of the public utility use.

- E. The proposed development is served with adequate water supply and waste disposal systems and will not place excessive demands on City services and infrastructure.

The Project will be an unmanned substation, and will, therefore, place little to no demand on the City's water supply and waste disposal systems, and other services and infrastructure.

- F. The Site Plan shows or includes adequate measures to prevent pollution of surface or groundwater, to minimize erosion and sediments, and to prevent changes in groundwater levels, increased run-off and potential for flooding.

There will be no increase of volume or rate of surface water runoff to neighboring properties and streets, and downstream properties, water courses, channels and conduits will not be affected by stormwater runoff as a result of the Project. The design elements of the Project are consistent with the protection of groundwater quality and quantity. The Project use is not noxious, harmful or hazardous, will not involve the storage or generation of hazardous materials or wastes and will have no harmful or negative effects pertaining to pollution of surface water, waterways or groundwater. The Project will not negatively affect any public water, sewer or storm drainage systems. Both during and after the construction of the Project, the Substation will result in zero reduction to the groundwater yield.

During construction, stormwater on the site will be controlled using approved erosion and sedimentation perimeter controls. Erosion and sedimentation controls on the site will utilize additional BMPs as set forth in MEC's Best Management Practices Manual for Massachusetts, including perimeter controls, a stabilized construction entrance, and stockpile stabilization. MEC intends to address construction-period impacts to the extent practicable using standard construction mitigation.