

**CITY OF LEWISTON, MAINE  
PLANNING BOARD**

**DECISION REGARDING  
CENTRAL MAINE POWER COMPANY'S APPLICATION FOR  
CONSTRUCTION OF THE LARRABEE ROAD ELECTRIC SUBSTATION FACILITY**

**Procedural Background**

Central Maine Power Company (CMP) has submitted a Conditional Use Permit Application for the construction of a new substation facility associated with the Maine Power Reliability Program (MPRP) located on Larrabee Road in Lewiston.

The proposed Larrabee Road Substation construction project in the City of Lewiston will be located at the easterly terminus of the Larrabee Road in Lewiston. The project involves:

- construction of a new 345/115kV substation on a 70-acre parcel at the end of Larrabee Road approximately 1,100 feet east of its junction with Main Street (U.S. Route 202). Approximately 24.40 acres will be disturbed during construction; however, 8.24 acres will be revegetated after construction, leaving 16.16 acres permanently developed. The crushed stone substation yard will total approximately 15.09 acres. A total of eight 115 kV terminations and two 345 kV terminations will interconnect at the substation. The substation yard will include construction of a single story control house, approximately 40 feet by 90 feet in size, to be located near the center of the yard. The actual size and location may vary slightly. Sanitation facilities will be constructed as part of the control house and will include the installation of a 1,500 gallon holding tank located adjacent to the building and a drilled well for a potable water supply. A separate permit application for installation of the holding tank (HHE 200) will be submitted (copy of HHE 200 included in Exhibit 4).

A total of eight 115 kV terminations and two 345 kV terminations will interconnect at the substation. The substation will step down voltage from 345 kV to 115 kV and provide switching capacity, a common process that involves the transfer or discontinuance of electrical load to other substation equipment or overhead lines for maintenance work and during line outages.

The substation has been sited at the easterly end of Larrabee Road at the junction of existing CMP transmission line corridors. All existing improvements (buildings, structures) associated with current residential and commercial uses on the property will be removed for the construction of the substation. The substation yard (disturbed/improved area) will be approximately 15.1 acres in area surrounded by security fencing. The yard itself will contain various electrical transformers and other equipment, and steel support structures for connections between the transformers and the various transmission lines feeding in and out of the substation. A single story 40 by 90 foot control house will be constructed near the middle of the yard area.

The proposed Larrabee Road Substation project is further described in the application package dated December 2010.

The City of Lewiston Planning Board has considered the application. Representatives of CMP presented the application and answered questions from members of the Planning Board.

### **Findings of Fact and Notice of Decision**

The Lewiston Planning Board hereby finds:

1. Applicant: Central Maine Power Company, 83 Edison Drive, Augusta, Maine 04336-0002
2. Property Owner: Central Maine Power Company, 83 Edison Drive, Augusta, Maine 04336-0002
3. Consultant: A. E. Newell III, TRC Companies, 14 Gabriel Drive, Augusta, Maine 04330
4. Development Proposed: Construction of a new 345/115kV substation on a 70-acre parcel at the end of Larrabee Road approximately 1,100 feet east of its junction with Main Street (U.S. Route 202). This facility qualifies as an Essential Services according to the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine, which is a conditional use in all but the River Front (RF), Neighborhood Conservation "B" (NCB), Downtown Residential (DR), Centreville (CV), Industrial (I), and No Name Pond Conservation Overlay (LC) districts.
5. Zoning: MDR zoning district and GC overlay district.
6. Property is identified as Tax Map 139, Lots 9, 10, and 21, and a portion of Tax Map 138, Lot 33.
7. The applicant has submitted a set of plans entitled:
  - Exhibit 1: Project Scope and Natural Resource Plan
  - Exhibit 2: Larrabee Road Substation Site Boundary Survey
  - Exhibit 3: Larrabee Road Substation Predevelopment Site Plan
  - Exhibit 4: Larrabee Road Substation Control House Plan
  - Exhibit 5: Larrabee Road Substation Stormwater Management Plans
    - Conceptual General Layout Plan
    - Soils Map
    - Pre-development Watershed Plan
    - Post-development Watershed Plans
    - Construction Details
    - Erosion Control Notes & Details
  - Exhibit 6: Larrabee Road Substation Planting Plan

- Exhibit 8: Location of Adjacent Lands and Corridors
- Exhibit 9: Project Site Zoning
- Exhibit 16: Sound Monitoring Survey Maps

### **Conditional Use Standards (Article X)**

8. Significant Adverse Impact: Though use of the site will change, there will be no adverse impact to surrounding properties. Once the substation is built, traffic over the Larrabee Road should decrease from current levels, as the substation will not be staffed. As some substation structures will be taller than present structures on the site, vegetative screens will be provided between the substation and adjacent residences to the west by retaining as much existing vegetation as possible and/or planting additional vegetation to buffer the view of the substation. There may be an increase in noise, dust, and vibration during construction of the project; otherwise, upon completion of the project noise, dust, odor, vibration, glare, smoke, litter or other nuisances to the surrounding area will be comparable with the existing levels of such. The proposed improvements are not expected to affect the functionality, quality, or quantity of groundwater available to abutting properties. CMP proposes to drill a well at the substation site in conjunction with the substation control house.
9. Vehicular and Pedestrian Access: Approximately 1,300 feet of gravel road/driveway will be improved/constructed for access from the end of the Larrabee Road to gate entrances on the northwest and southwest corners of the Larrabee Road Substation. A security gate will be near the terminus of the Larrabee Road to restrict vehicular access to the facility. CMP will also construct a turnaround area on the northerly side of Larrabee Road for City of Lewiston safety and public work vehicles. There are no pedestrian facilities or improvements associated with this project.
10. Municipal Services and Facilities: There will no impact to municipal services or facilities from this project.
11. Soils: Based on analysis of the Soil Survey Geographic Database compiled by the United States Department of Agriculture – Natural Resources Conservation Service, soils will accommodate the proposed MPRP construction activities.
12. Scale, Design, Massing: The substation structure will differ from the adjacent residential properties in materials, scale and mass. To address these differences between the substation and adjacent properties, CMP will provide a vegetative buffer consisting of existing vegetation and additional planted vegetation where needed between the substation and the adjacent residences.

### **District Regulations (Article XI)**

13. Rural Agricultural District: Not applicable.

14. Low-density Residential District: Not applicable.
15. Suburban Residential District: Not applicable.
16. Medium-density Residential District: The project meets the standards.
17. Riverfront District: Not applicable.
18. Neighborhood Conservation "A" District: Not applicable.
19. Neighborhood Conservation "B" District: Not applicable.
20. Office-residential District: Not applicable
21. Downtown Residential District: Not applicable.
22. Institutional Office District: Not applicable
23. Community Business District: Not applicable.
24. Highway Business District: Not applicable.
25. Centreville District: Not applicable.
26. Office Service District: Not applicable.
27. Industrial District: Not applicable.
28. Urban Enterprise District: Not applicable.
29. Mill District: Not applicable.
30. Resource Conservation District: Not applicable.
31. Groundwater Conservation Overlay District: The project meets the standards.
  - a. *Timber harvesting*: Not applicable.
  - b. *Agriculture*: Not applicable.
  - c. *Animal husbandry*: Not applicable.
  - d. *Impervious surface*: The project meets the ratio for the district.
  - e. *Industrial and commercial uses*: Not applicable.

- f. *Subsurface wastewater disposal systems:* Applicant will submit a Subsurface Wastewater Disposal System Application for a 1,500 gallon holding tank associated with the substation control house.
- g. *Earth material extraction:* Not applicable.
- h. *Pesticides and herbicides:* Selective use of herbicides and their application as outlined in the Conditional Use Permit Application does not impose a threat to groundwater quality.
- i. *Development approval:* Applicant has provided appropriate plans and measures as outlined in the Conditional Use Permit Application for protecting the groundwater from adverse impacts from loss of recharge capacity, exfiltration from sewer pipes and contamination by oils, chemical or nutrients.

32. No Name Pond Conservation Overlay District: Not applicable.

33. Mobile Home Park Overlay District: Not applicable.

#### **Performance Standards (Article XII)**

34. Shoreland Areas: Not applicable.

35. Timber Harvesting: Not applicable.

36. Earth Material Removal: Not applicable.

37. Swimming Pools: Not applicable.

38. Walls and Fences: The Larrabee Road substation will be enclosed with an eight (8) foot high chain link security fence with an additional foot of height that includes extension arms and barbed wire for a total fence height of nine (9) feet. The fencing proposed for the Larrabee Road Substation complies with National Electrical Safety Code, North American Electric Reliability Corporation, and CMP's substation fence standards.

39. Wind Energy Conservation Systems: Not applicable.

40. Adult Business Establishment and Drinking Places: Not applicable.

41. Frontage Right-of-Way Provisions: Not applicable.

42. In-law Apartments: Not applicable.

43. Campgrounds: Not applicable.

44. Installation of Mobile Homes on Individual Lots: Not applicable.

45. Installation of Mobile Homes in Mobile Home Parks: Not applicable.
46. Erosion and Sedimentation Control: The project meets the standards.
47. Signs: CMP will apply to the code enforcement officer for all signs to be installed for the Larrabee Road Substation.
48. Off-street Parking and Loading: Parking and loading areas for employees and contractors will be provided within the confines of the Larrabee Road Substation property.
49. Improvement Standards: Not applicable.
50. Environmental Performance:
  - a. *Smoke*: Not applicable.
  - b. *Noise*: The project meets the noise standards for the City of Lewiston and the Maine Department of Environmental Protection.
  - c. *Vibration*: Vibration associated with the MPRP project would only occur during construction of the facilities, and therefore are exempt from this standard.
  - d. *Odors*: Not applicable
  - e. *Air Pollution*: Not applicable.
  - f. *Electrical Disturbance or Interference*: Not applicable.
51. Child Care Facilities: Not applicable.
52. Residential Design for Downtown Residential and Riverfront Districts: Not applicable.

### **Development Review and Standards (Article XIII)**

53. Utilization of Site: The selected site will support the proposed development while minimizing impacts to the community, individual property owners, and the environment. Project development in wetlands will be compensated for in the MPRP compensation and restoration plan. Environmentally sensitive areas will be protected during construction.
54. Traffic Movement: There will be no traffic movement increases associated with this project, other than that associated with construction, which may result in slight increases for that time period.
55. Access into the Site: Access to the corridors will be over existing public roads, private land over which CMP has access rights, and existing CMP-maintained access points and ways used for routine and emergency maintenance. Temporary light duty access ways will be established for use during the construction phase.

56. Internal Vehicular Circulation: Not applicable.
57. Pedestrian Circulation: Not applicable.
58. Stormwater Management: A net increase of approximately 0.67 acre of impervious surface (1.07 acres total impervious surface) will occur from substation construction. A stormwater management plan has been designed for the substation yard and access road in accordance with Maine Department of Environmental Protection requirements (Chapter 500). The substation project will not adversely affect any mapped aquifers, the quality or quantity of groundwater, or any public or private water source. Stormwater from the substation will be disposed of onsite and will not be directed to the municipal storm drainage system.
59. Erosion Control: CMP's "*Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects*" (2007), was developed in consultation with the Maine Department of Environmental Protection (MDEP) and is based on MDEP's *Maine Erosion and Sediment Contrail BMP's*, dated March 2003, and MDEP's Chapter 500.
60. Water Supply: A drilled well will be installed at the substation to provide a potable water supply to the control building for sanitation purposes.
61. Sewage Disposal: A 1,500 gallon holding tank will be installed at the substation to handle wastewater generated at the control house.
62. Utilities: Adequate utility capacity exists to service the proposed substation facility.
63. Natural Features: The site will be altered to allow construction of the substation, and it is estimated that cut and fill volumes for the substation will be 52,332 and 130,424 cubic yards, respectively. Clearing of vegetation will be required to accommodate the upgrades and ensure that the project meets federal reliability and safety standards. The amount of clearing will be limited to that which is necessary for development of the project
64. Groundwater Protection: The substation construction will not adversely affect any mapped aquifers, the quality or quantity of groundwater, or any public or private water source.
65. Water and Air Pollution: Storage, transport, and use of oil, hazardous materials and wastes will be in accordance with best management practice and applicable local, state, and federal regulations, uncontrolled spills or releases to the environment will be avoided, and sufficient spill cleanup and containment supplies will be maintained on-site to control releases of oil, hazardous materials or wastes.
- There is no air pollution issues associated with this project.
66. Exterior Lighting: Adequate exterior lighting for the security and use of the substation has been provided for, and designed and shielded to avoid undue adverse impact on neighboring properties.

67. Waste Disposal: Most of construction materials will be recycled or reused; those materials that are not will be shipped to a licensed landfill, transfer station, or incinerator.
68. Lot Layout: Not applicable.
69. Landscaping: Natural vegetation will be retained to the greatest extent possible and additional vegetation will be planted between the substation site and the adjacent residence on the south side of the Larrabee Road.
70. Shoreland Relationship: The project will not adversely affect the water quality or shoreline on any adjacent water body. The project does not involve providing access to abutting navigable waters.
71. Open Space: Not applicable.
72. Technical and Financial Capability: Applicant has the technical and financial capability to complete the project.
73. Buffering: Natural vegetation will be left on the substation site except for the areas to be developed for the substation yard, access road, and the associated transmission line corridors extending into and out of the substation. A natural vegetative buffer will be retained and enhanced with plantings between the substation site and the adjacent residence on the north side of Larrabee Road. CMP will plant a softwood vegetative buffer between the substation and the adjacent house on the south side of the Larrabee Road.
74. Compliance with District Regulations: The project is in compliance with the district regulations of Article 11 of the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine.
75. Design Consistent with Performance Standards: The project is in compliance with the performance standards of Article 12 of the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine.
76. Coordination with State Subdivision Law: Not applicable.
77. Design Guidelines: Applicant will consider site plan review and design guidelines suggested by municipal officials for this project.
78. Additional standards for single-family cluster developments: Not applicable.
79. Additional standards for multi-unit residential development: Not applicable.
80. Additional standards for mobile home parks: Not applicable.
81. Additional standards for private commercial or industrial subdivisions: Not applicable.

82. Expiration of Approval: Due to the overall size and scope of the MPRP project, applicant may need to submit time extension requests pursuant to the requirements under this Section.
83. Performance Guarantee: Not applicable.
84. Independent Professional Review: Not applicable.
85. Additional standards for large-scale retail development: Not applicable.

The Planning Board has considered the following criteria for a Conditional use Permit and has determined:

1. The proposed construction of new substation facility meets the definition and specific requirements set forth in the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine.
2. The project will reflect the natural capabilities of the site to support the development. Environmentally sensitive areas such as wetlands, steep slopes, floodplains and unique natural features will be maintained and preserved to the maximum extent. Natural drainage will be preserved to the maximum extent.
3. Vehicular access to the project is on roads that have adequate capacity to accommodate traffic generated by the project.
4. Vehicular access into the project area is safe and convenient.
5. Internal vehicular circulation through the site is safe and convenient.
6. Pedestrian access to the project is not applicable.
7. Adequate provision has been made to handle stormwater runoff and other drainage issues on the site.
8. Adequate provision has been made to control erosion and sedimentation as outlined in the application.
9. Adequate provision has been made for a water supply for this project.
10. Adequate provision has been made for sewage disposal for this project.
11. Adequate provisions have been made for electrical and telephone service for this project.
12. Adequate provision has been made to preserve the natural landscape.
13. Adequate provisions have been made to protect the quantity and quality of groundwater available to abutting properties or public water supply systems.

14. Adequate provision has been made to prevent water pollution. Provision need not be made for air pollution.
15. Adequate provisions have been made for exterior lighting.
16. Adequate provisions have been made for the disposal and/or recycling of solid wastes. Provision need not be made for hazardous wastes as the project will not generate such products.
17. The project will utilize existing lots; therefore, lot layout need not be considered.
18. Adequate provision has been made for landscaping/buffering.
19. Adequate provision has been made to ensure water quality and shorelines of adjacent water bodies are not impacted.
20. Provision need not be made for open space.
21. Adequate provision of the applicant's technical and financial capacity to complete the project has been demonstrated.
22. Applicant has established the project is consistent with the district regulations of Article XI of the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine.
23. Applicant has established that the project is consistent with and applicant will comply with the applicable performance standards of Article XII of the Zoning and Land Use Ordinance Code of the City of Lewiston, Maine.
24. Provision need not be made for coordination with state subdivision law.
25. Adequate provision has been made for design guidelines suggested by municipal officials for this project.
26. Provision need not be made for coordination for single family cluster developments, multi-unit residential development, mobile home parks, or private commercial or industrial developments.
27. A performance guarantee is not required.
28. An independent professional review is not required.
29. Provision need not be made for large-scale development.

## Conclusions of Law

The Planning Board adopts the conclusions contained in the application and its accompanying materials and related submissions with respect to the review and approval standards contained in the Conditional Use, District Regulations, Performance Standards, and Development Review and Standards sections of the Zoning and Land Use Code for the City of Lewiston.

## CONCLUSION

Based on the foregoing, CMP's application is APPROVED, subject to the following conditions:

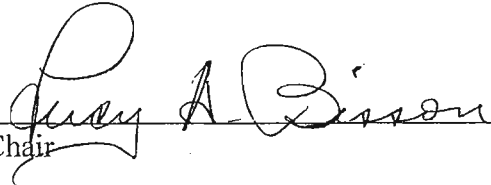
1. This permit shall not take effect until CMP has obtained the following state and federal permits required for this project: Maine PUC Certificate of Public Convenience and Necessity, Maine DEP Site Location of Development Law, Maine DEP Natural Resources Protection Act, and Army Corps of Engineers § 404 Clean Water Act. CMP shall promptly submit copies of such permits to the Town, and the date of such submission shall be considered this permit's effective date, the date of the permit, and the date of "issuance" as used in Article XIII, Section 3(g)(3)c.9 of the Zoning and Land Use Code for the City of Lewiston.
2. If no substantial start in construction is made within two years of the date of issuance, this permit shall expire. Due to the nature and scope of the project, the Board recognizes that a two-year timeline to complete construction of that portion of the project in the City of Lewiston may not be achievable. Therefore, the Board orders that, to expedite review, if the project has not been completed within two years after the effective date of this permit, this permit shall be extended for one additional year (consistent with the expiration time frame contained in the site plan review sections of the Zoning and Land Use Code, Article X, Section 5), provided that CMP submits a letter to the Planning Board at least 60 days prior to the initial expiration of this permit certifying that all information contained in its application and presented to the Board is still materially correct and complete.
3. CMP will provide written notice of any clearing to the City and direct abutters of the substation lot where clearing is to occur. Said notice must be made at least 60 days prior to any clearing activity and said clearing activity must occur within 45 days (weather permitting) of said notice. Areas in which buffers or vegetation is to remain must be clearly delineated in the field for both the applicant and abutting property owners to know exactly what vegetation will be removed and be maintained.
4. Prior to approval of issuance of a certificate of occupancy for substation, certification shall be provided by a professional engineer that all approved stormwater improvements have been completed in accordance with the approved plans.
5. Upon start of substation construction, weekly erosion control reports shall be provided to the city until the project is completed.

6. In the event that the City finds work activity related to the project to be in violation of the approved plan, the City will provide notification of the incident to CMP. Upon notification, CMP will immediately initiate a site visit with the City's representative, a CMP representative, and the contractor. During the site visit the incident will be discussed and depending on the severity of the violation, work at the site may be temporarily suspended.

Any person aggrieved by this decision may appeal by filing a written notice of appeal to the Board of Appeals within 30 days of the date of the Planning Board's decision.

All concurring.

DATED:

  
Chair

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