CENTRAL MAINE POWER COMPANY
Site Location of Development Act // Natural Resources Protection Act
Upgrade of Transmission Corridor – 78 Municipalities

Order under Appeal

246

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

CENTRAL MAINE POWER COMPANY	) SITE LOCATION OF DEVELOPMENT ACT
78 Municipalities (listed in Appendix A)	) NATURAL RESOURCES PROTECTION ACT
13 Counties (listed in Appendix A)	) FRESHWATER WETLAND ALTERATION
MAINE POWER RELIABILITY PROGRAM	) VERNAL POOL ALTERATION
L-24620-26-A-N	) INLAND WADING BIRD AND
L-24620-TG-B-N	) WATERFOWL HABITAT
L-24620-VP-C-N	) STREAM ALTERATION
L-24620-IW-D-N	) WATER QUALITY CERTIFICATION
L-24260-L6-E-N (approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq. and 480-A et seq., and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of CENTRAL MAINE POWER COMPANY with the supportive data, agency review comments, comments from members of the public and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History of Project: Central Maine Power Company (CMP) has been developing its transmission corridors over a period of years. Much of this development pre-dates the Site Location of Development Law (Site Law) and the Natural Resources Protection Act (NRPA). There also have been many Department and Board Orders issued in the past which have approved the construction of new electrical transmission lines, upgrades of existing electrical transmission lines and the construction and expansion of new and existing substations. Previous Department Orders issued for projects located in this transmission corridor include: #49-0834-05269, dated February 27, 1974; #49-6001-10020 and #49-6001-11130, both dated May 23,1979; #L-17618-29-A-N, dated August 28, 1991; #L-016261-29-A-N, dated January 19, 1994; #L-19673-24-A-N and #L-19673-31-B-M, both dated December 4, 1998; #L-19673-31-B-M, dated December 4, 1998; and #L-19673-24-M-M and #L-19673-TA-N-N, both dated March 20, 2008. Previous Department Orders issued for substation projects located within the corridor under consideration in this Order include #L-23715-26-A-N (Maguire Road substation expansion in Kennebunk), dated September 28, 2007; #L-17618-TE-C-N (Spring Street substation expansion in Westbrook), dated March 10, 2000; #L-T00822-TB-A-N (Surowiec Substation expansion in Pownal), dated September 8, 1999; and #L-17973-26-AJ-M and #L-17973-26-AK-T (Maine Yankee Substation expansion in Wiscasset), dated December 15, 2006.

B. Summary: With this application the applicant is requesting permits for a proposal to upgrade 354 miles of existing electrical transmission corridor that runs between Eliot and Orrington and construct an additional 6.4 miles of new electrical transmission corridor (Segment 15Alt.). The project will affect 78 municipalities and is known as the

Maine Power Reliability Program (MPRP). It involves the upgrade of existing transmission systems to 345 kilovolt (kV) and 115 kV, the rebuilding of existing 345 kV and 115 kV lines and the construction or expansion of 13 substations. The applicant conducted a Needs Assessment which assumed that no Maine generating stations would be retired, while considering all currently proposed plan applications to upgrade the generation and transmission system in Maine and New England as if they were constructed and operating. The results of the needs assessment were submitted with the NRPA application. The applicant states that the purpose of the proposed project is to make necessary improvements to the existing bulk power transmission system to ensure compliance with federally mandated power transmission system standards and to continue to provide power and service to the applicant's customers. The applicant further states that the existing transmission system is presently at the limits of its technical and physical ability to meet the growing demand of Maine customers and the reliability standards established by the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council (NPCC) and the Independent System Operator of New England (ISO-NE).

Transmission Lines: Both the proposed 115 kV lines and 345 kV lines will be supported on a variety of poles, depending on site conditions. The types of poles include single pole structures, H-frame structures and lattice structures. The typical height of single pole structures will range between 125 feet and 135 feet. The height of a typical H-frame structure is 84 feet. Lattice structures are used at major crossings, such as river crossings, and can range in height between 140 feet and 350 feet tall.

Certain portions of the upgraded project, specifically Segments 10A, 30A, 34A, 34B, 34C, 35B, 38B, and 40A, are considered to be re-rated lines which are not subject to approval under the Site Location of Development Act (Site Law). Re-rated lines are existing transmission lines that will be rebuilt and/or reconstructed in the same right-of-way. 38 M.R.S.A. §488 states, "This article does not apply… to the rebuilding or reconstruction of natural gas pipelines or transmission lines within the same right-of-way." However any impacts to protected natural resources in these segments are regulated by the NRPA. Summaries of the individual segments and the resources affected are listed below:

Segment 1 involves the construction of a new 115 kV transmission line and a new 345 kV transmission line in an existing 15.5 mile transmission line corridor from the Orrington Substation to the point where it meets Segments 3 and 4 in Frankfort. The segment is located in the towns of Orrington, Bucksport, Winterport, and Frankfort. Ninety-three wetlands were identified, delineated, and mapped within the Segment 1 transmission line corridor. Segment 1 crosses the Penobscot River, Marsh Stream, Sedgeunkedunk Stream, Fields Pond, Meadow Brook, and several smaller tributaries.

Segment 2 involves the upgrade and relocation of the two existing 115 kV transmission lines in a 0.3 mile transmission line corridor in Bucksport from the Verso Paper Mill to the existing Section 205, approximately 1,800 feet north of the existing Bucksport Substation. Segment 2 is located adjacent to a tidal-influenced stretch of the Penobscot

River. There will be no temporary or permanent impacts to wetlands either from clearing or fill.

Segment 3 involves the construction of a new 345 kV transmission line in an existing 24.4 mile transmission corridor from the junction of Segments 1 and 4 in Frankfort to the Detroit Substation in Detroit. The segment is located in the towns of Frankfort, Monroe, Winterport, Dixmont, Troy, Plymouth and Detroit. One hundred and fourteen wetlands were identified, delineated, and mapped within the Segment 3 transmission line corridor. Segment 3 crosses Marsh Stream, Thurlow Brook, Martin Stream, Chase Stream, Olney Brook, Chase Bog, Cates Meadows, Big Meadow Bog and the East Branch of the Sebasticook River.

Segment 4 involves the construction of a 115 kV transmission line, built to 345 kV standards, in an existing 8.9 mile transmission line corridor from the intersection of Segments 1, 3 and 4 in Frankfort to where it meets Segment 6 on the Waldo/Brooks town line. The segment is located in the towns of Frankfort, Monroe, Swanville, Waldo and Brooks. Forty two wetlands were identified, delineated, and mapped within the Segment 4 transmission line corridor. Dead Brook, White Brook, and several small unnamed streams traverse the segment.

Segment 6 involves the construction of a 115 kV transmission line, built to 345 kV standards, in an existing 29.6 mile transmission line corridor from the intersection of Segment 4 to the intersection of Segments 6 and 10, just northwest of the proposed Coopers Mills Road Substation, in Windsor, Maine. The segment is located in the towns of Waldo, Montville, Morrill, Searsmont, Brooks, Appleton, Liberty, Washington, Hibberts Gore, Somerville and Windsor. One hundred and seventy two wetlands were identified, delineated, and mapped within the Segment 6 transmission line corridor. The Sheepscot River, St. George River, Medomak River, Passagassawakeag River, Fish Brook, Simmons Brook, Bartlett Stream, Lovejoy Stream, Dead Brook, Davis Stream, Stearns Brook, White Brook, Crummett Brook, and numerous unnamed tributary streams as well as Smith Millpond Bog and Witcher Swamp traverse the Segment 6 transmission line corridor.

Segment 9 involves the construction of a 345 kV transmission line in an existing 19.4 mile transmission line corridor from the Detroit Substation in Detroit to the proposed Albion Road Substation in Benton. The segment is located in the towns of Detroit, Pittsfield, Burnham, Clinton and Benton. One hundred and nineteen wetlands were identified, delineated, and mapped within the Segment 9 transmission line corridor. Segment 9 crosses the Sebasticook River, Beaver Brook, Johnson Brook, Farnham Brook, Twelve mile Brook, and several smaller unnamed tributaries. Segment 9 also traverses Douglas Pond, a dammed up portion of the Sebasticook River.

Segment 10 involves the construction of a 345 kV transmission line, the rebuilding of an existing 115 kV transmission line and the construction of a new 115 kV transmission line in an existing 20.8 mile transmission line corridor from the proposed Albion Road Substation in Benton to the proposed Coopers Mills Road Substation in Windsor. The segment is located in the towns of Winslow, Benton, Albion, China and Windsor. One

hundred one wetlands were identified, delineated, and mapped within the Segment 10 transmission line corridor. Dutton Pond, West Branch Sheepscot River, Hewitt Brook, Hunter Brook, Dearborn Brook, and Meadow Brook and various unnamed tributaries traverse Segment 10.

Segment 10A involves the upgrade of an existing 115 kV transmission line in an existing 5 mile transmission line corridor from the Winslow Substation in Winslow to the proposed Albion Road Substation in Benton. The segment is located in the towns of Benton and Winslow. Thirty six wetlands were identified, delineated, and mapped within the Segment 10A transmission line corridor. Fowler Brook transverses Segment 10A. Other waterbodies along this segment include tributaries to Fowler Brook, the Kennebec River and the Sebasticook River.

Segment 14 involves the construction of a 115 kV transmission line in an existing 23.2 mile transmission line corridor from the Larrabee Road Substation in Lewiston to the Livermore Falls Substation in Livermore Falls. The segment is located in the towns of Livermore Falls, Leeds, Greene and Lewiston. One hundred thirty two wetlands were identified, delineated, and mapped within the Segment 14 transmission line corridor. Segment 14 crosses Clay Brook, Redwater Brook, Hunton Brook, Scott Brook, Allen Stream, Stetson Brook, Dead River, and several smaller tributaries.

Segment 15 involves the construction of 345 kV transmission line in an existing 33.6 mile transmission line corridor from the existing Gulf Island Substation in Lewiston, Maine to the existing Maxcys Substation in Windsor. The segment is located in the towns of Windsor, Chelsea, Whitefield, Augusta, Farmingdale, West Gardiner, Litchfield, Monmouth, Wales, Greene and Lewiston. Two hundred and thirty two wetlands were identified, delineated, and mapped within the Segment 15 transmission line corridor. Segment 15 crosses Woodbury Pond, Horseshoe Pond, Stickney Brook, Togus Stream, Stetson Brook, Cobbosseecontee Stream, Dead River, Dilnow Brook, Cold Stream, Jock Stream, and Grover Brook. Segment 15 also traverses many unnamed tributaries.

Segment 15Alt. involves the construction of a new 345 kV transmission line and a new 115 kV transmission line in a new 6.4 mile long, 250 foot wide transmission line corridor and extends north of Segment 15 from West Gardiner to Monmouth. The segment is located in West Gardiner, Litchfield and Monmouth. This segment is the only new corridor in the project. The applicant designed this new corridor segment in an attempt to lessen direct impacts, both physical and scenic, in the Tacoma Lakes (including Woodbury Pond). Approximately 5.8 miles of existing 115 kV and 345 kV transmission lines in Segment 15 will be removed as a result of the construction of Segment 15Alt. Forty four wetlands were identified, delineated, and mapped within the Segment 15Alt. transmission line corridor. Segment 15Alt. will cross Cobbosseecontee Stream, Grover Brook and unnamed tributaries to Cobbosseecontee Stream, Grover Brook, and Little Purgatory Pond.

Segment 16 involves the separation of two 345 kV transmission lines currently located on lattice structures and the relocation of a 115 kV transmission line in an existing 2.4 mile

transmission line corridor as they cross the Abagadasset River and Kennebec River in the towns of Bowdoinham and Woolwich. Fifteen wetlands were identified, delineated, and mapped within the Segment 16 transmission line corridor. Segment 16 crosses the Abagadasset River, the Kennebec River, and Merrymeeting Bay.

Segment 17 involves the construction of a 345 kV transmission line in an existing 16 mile transmission line corridor from one mile to the east of Gulf Island Substation in Lewiston to the Surowiec Substation in Pownal. The segment is located in the towns of Lewiston, Auburn, Durham and Pownal. One hundred and twenty nine wetlands were identified, delineated, and mapped within the Segment 17 transmission line corridor. Segment 17 is traversed by the Androscoggin River, Runaround Brook, House Brook, Libby Brook, Stetson Brook, No Name Brook, and numerous unnamed tributary streams.

Segment 18 involves the construction of a 345 kV transmission line in an existing 7.1 mile transmission line corridor between the Surowiec Substation in Pownal to a point 1,800 feet southwest of Route 115/Gray Road in North Yarmouth. The segment is located in the towns of Pownal and North Yarmouth. Sixty wetlands were identified, delineated, and mapped within the Segment 18 transmission line corridor. Segment 18 crosses the Royal River, Runaround Brook, Chandler Brook, and numerous unnamed tributaries.

Segment 19 involves the construction of a 345 kV transmission line in a 5.3 mile transmission line corridor from a point 1,800 feet south of Route 115/Gray Road in North Yarmouth to the proposed Raven Farm Substation in Cumberland. The segment is located in the towns of North Yarmouth, Yarmouth and Cumberland. Forty seven wetlands were identified, delineated, and mapped within the Segment 19 transmission line corridor. Segment 19 is traversed by the East Branch of the Piscataqua River, Deer Brook, Maxfield Brook, Windle Brook, and tributaries to these named waterbodies and to Broad Cove and Mill Brook.

Segment 24 involves the construction of a 345 kV transmission line in a 21 mile transmission line corridor between the South Gorham Substation in Gorham and Maguire Road Substation in Kennebunk. The segment is located in the towns of Gorham, Scarborough, Saco, Biddeford, Arundel and Kennebunk. One hundred sixty three wetlands were identified, delineated, and mapped within the Segment 24 transmission line corridor. Segment 24 is traversed by the South Branch of the Stroudwater River, the Saco River, the Kennebunk River, the Mousam River, Nonesuch River, Boynton Brook, Swan Pond Brook, Ward Brook, Skilly Brook, Day Brook and numerous small unnamed streams.

Segment 27 involves the construction of a 345 kV transmission line in an existing 19 mile transmission line corridor between Maguire Road Substation in Kennebunk to the Three Rivers Substation in Eliot. The segment is located in the towns of Kennebunk, Wells, North Berwick, South Berwick and Eliot. One hundred fifty four wetlands were identified, delineated, and mapped within the Segment 27 transmission line corridor. Segment 27 is traversed by Knights Pond, Great Works River, Merriland River, Shoreys

Brook, Lord Brook, West Brook, Branch Brook, Quamphegan Brook, Knights Brook, Hussey Brook and a number of unnamed tributary streams.

Segment 29 involves a rebuild of both 115kv and 345kv transmission lines; the segment, originates in Woolwich and extends to the Maine Yankee Substation in Wiscasset. Also proposed for segment 29 is a re-rate of an existing 345 kV line that extends from the Maine Yankee Substation to the Mason Substation in the existing 3.2 mile transmission line corridor between the junction of Segment 11 and the Maine Yankee Substation in Wiscasset. The segment is located in the towns of Woolwich and Wiscasset. Fifty six wetlands were identified, delineated, and mapped within the Segment 29 transmission line corridor. Segment 29 crosses Ward Brook, Montsweag Brook, Montsweag Bay, Hilton Cove, and several unnamed tributary streams.

Segment 30A involves the re-rate of an existing 115 kV transmission line in an existing 1.8 mile transmission line corridor between Methodist Road and the Prides Corner Substation in Westbrook. The segment is located in the City of Westbrook. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are 5 to 15 feet taller. The new structures will be located approximately in the same locations as the existing structures. Twenty wetlands were identified, delineated, and mapped within the Segment 30A transmission line corridor. Segment 30A crosses Mill Brook and several smaller unnamed perennial and intermittent tributaries.

Segment 34A involves the re-rate of an existing 115 kV transmission line in an existing 10 mile transmission line corridor between the Heywood Road Substation in Benton to the Rice Rips Substation in Oakland. The segment is located in the towns of Winslow, Benton, Fairfield, Waterville and Oakland. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are 5 to 15 feet taller. The new structures will be located in approximately the same locations as the existing structures. Forty-five wetlands were identified, delineated, and mapped within the Segment 34A transmission line corridor. Segment 34A is crossed by the Kennebec River, Fish Brook, Emery Brook and Messalonskee Stream (twice).

Segment 34B involves the re-rate of an existing 115 kV transmission line in an existing 4 mile transmission line corridor between the Lakewood Substation in Madison to the intersection of CMP Sections 83B and 83 in Cornville. The segment is located in the towns of Cornville and Madison. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are 5 to 15 feet taller. The new structures will be located in approximately the same locations as the existing structures. Twenty one wetlands were identified, delineated, and mapped within the Segment 34B transmission line corridor. Segment 34B is crossed by Devils Bog Brook, West Branch Cold Brook, Smith Pond, Rowell Bog, and Wesserunsett Lake.

Segment 34C involves the re-rate of an existing 115 kV transmission line in an existing 3.3 mile transmission line corridor between the Sappi Paper Company facility to Oak Pond Road in Skowhegan. This segment is located in the Town of Skowhegan. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-

frame structures that are 5 to 15 feet taller. The new structures will be located in approximately the same locations as the existing structures. Twenty-two wetlands were identified, delineated, and mapped within the Segment 34C transmission line corridor. Segment 34C is crossed by the Kennebec River and Canaan Bog.

Segment 35 involves the construction of a 115 kV transmission line in an existing 21.7 mile transmission line corridor between the proposed Coopers Mill Substation in Windsor to the Highland Substation in Warren. This segment is located in the towns of Windsor, Jefferson, Waldoboro, Washington, Warren. One hundred eighty three wetlands were identified, delineated, and mapped within the Segment 35 transmission line corridor. Segment 35 is crossed by the Sheepscot River, West Branch Oyster River, Medomak River, Dyer River, Seven Tree Pond, and White Oak Pond. Segment 35 is also traversed by Alford Brook, Black Brook, Brann Brook, Meadow Brook, Travel Brook, Davis Stream, Pitcher Brook, West Branch Davis Stream and many unnamed tributaries.

Segment 35B involves the re-rate of an existing 115 kV transmission line in an existing 6.2 mile transmission line corridor between the Augusta East Side Substation in Augusta to intersection of the Section 88 and Section 60 transmission corridors in Chelsea. The segment is located in the City of Augusta and the town of Chelsea. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are five to 15 feet taller. The new structures will be located in approximately the same locations as the existing structures. Forty wetlands were identified, delineated, and mapped within the Segment 35B transmission line corridor. Segment 35B is crossed by Lower Togus Pond, and Riggs Brook.

Segment 38B involves the re-rate of an existing 115 kV transmission line in an existing 10.6 mile transmission line corridor between Hotel Road Substation in Auburn, to Minot near Little Winslow Pond. This segment is located in the towns of Minot and Auburn. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are 5 to 15 feet taller. The new structures will be located approximately in the same locations as the existing structures. Sixty-two wetlands were identified, delineated, and mapped within the Segment 38B transmission line corridor. Segment 38B crosses Lapham Brook, Hodgkins Brook, and numerous unnamed perennial and intermittent tributary streams.

Segment 39 involves the construction of a 115 kV transmission line in an existing 20.8 mile transmission line corridor between the Livermore Falls Substation in Livermore Falls and the Rumford Industrial Park Substation in Rumford. The segment is located in the towns of Livermore Falls, Jay, Canton, Dixfield, Peru and Rumford. One hundred nine wetlands were identified, delineated, and mapped within the Segment 39 transmission line corridor. Segment 39 crosses the Androscoggin River and traverses several major and minor drainages associated with the river. Segment 39 also crosses Spears Stream, Worthley Brook, Seven mile Stream, Wyman Brook, Lower Stony Brook, Upper Stony Brook, Mosquito Brook, Ridley Brook, and several unnamed perennial and intermittent tributaries.

Segment 40A involves the re-rate of an existing 115 kV transmission line in an existing 8.8 mile transmission line corridor between the Searsport Substation in Searsport to the Penobscot River in Prospect. This segment is located in the towns of Prospect, Stockton Springs, and Searsport. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with single pole structures that are approximately 75 feet tall. The new structures will be located in approximately the same locations as the existing structures. Fifty-five wetlands were identified, delineated, and mapped within the Segment 40A transmission line corridor. Segment 40A ends at the Penobscot River and traverses Hawes Stream, Carley Brook, Main Stream, Long Cove Brook and several unnamed tributaries.

Segment 40B involves the re-rate of an existing 115 kV transmission line in an existing 0.5 mile transmission line corridor between the existing Belfast Substation to a point where it meets an existing transmission line in an adjacent transmission line corridor. Additionally, a new 115 kV transmission line will be constructed in the same corridor. This segment is located in the Town of Belfast. The re-rate will involve the replacement of the existing 45 foot tall H-frame structures with H-frame structures that are approximately 5 to 15 feet taller. The new structures will be located in approximately the same locations as the existing structures. Three wetlands were identified, delineated, and mapped within the Segment 40B transmission line corridor. Segment 40B does not cross any streams.

Segment 41 involves the removal of a 34.5 kV transmission line in an existing 4.0 mile transmission line corridor between Segment 15 and Highland Avenue at the West Gardiner/Gardiner town line. The segment is located in the towns of West Gardiner, Gardiner and Farmingdale. Thirty-eight wetlands were identified, delineated, and mapped within the Segment 41 transmission line corridor. Segment 41 is traversed by Cold Stream, Grover Brook, and unnamed tributaries to the Kennebec River, Cold Stream, and Grover Brook.

Substations: Five new substations will be constructed: Albion Road Substation in Benton, Coopers Mills Road Substation in Windsor, Larrabee Road Substation in Lewiston, Monmouth Substation in Monmouth and Raven Farm Substation in Cumberland. Seven existing substations will be expanded: Belfast Substation in Belfast, Highland Substation in Warren, Livermore Falls Substation in Livermore Falls, Maguire Road Substation in Kennebunk, Maine Yankee Substation in Wiscasset, Spring Street Substation in Westbrook, and Surowiec Substation in Pownal. The Orrington Substation will be upgraded. No expansion will occur and work will be limited to the area within the existing fence line. Three existing substations will be decommissioned and removed: Days Corner switch station in Monmouth, Maxcys Substation in Windsor and Wales Corner Substation in Wales.

Wetlands were identified on the project sites at the proposed Albion Road in Benton, Coopers Mills Road Substation in Windsor, Larrabee Road Substation in Lewiston and Raven Farm Substation in Cumberland. Wetlands were identified on the proposed expansions sites of Highland Substation in Warren, Maguire Road Substation in Kennebunk, Maine Yankee Substation in Wiscasset, Spring Street Substation in

Westbrook, and Surowiec Substation in Pownal. No wetlands were identified at the Belfast Substation in Belfast, Livermore Falls Substation in Livermore Falls, Orrington Substation in Orrington and Monmouth Substation in Monmouth.

The applicant is also seeking approval under the NRPA to permanently fill 13.71 acres of freshwater wetlands for the installation of poles and the construction of new substations or expanded substations. Of the 13.71 acres, 3.01 acres of fill will be located in freshwater wetlands of special significance. In order to construct the proposed project, the applicant proposes to construct temporary access roads within the transmission line corridors. Access roads that will be in place less than 18 months will alter 51.16 acres of freshwater wetland of special significance and 58.66 acres of freshwater wetlands. Access roads that will be in place greater than 18 months will alter 4.03 acres of freshwater wetlands of special significance and 5.70 acres of freshwater wetlands. The applicant proposes to relocate a portion of a stream in conjunction with the expansion of Surowiec substation in Pownal.

Construction of the improvements to the existing transmission line corridor and the construction of a new transmission line corridor (Segment 15 Alt.) will permanently convert 366 acres of freshwater wetlands from forested habitats to scrub shrub and herbaceous habitats. Construction of the improvements to the existing transmission line corridor and the construction of a new transmission line corridor will convert 70.21 acres of forest to scrub shrub and herbaceous cover types within 250 feet of significant and U.S. Army Corps of Engineers jurisdictional vernal pool habitat. The project as a whole will also convert 13.84 acres of forest in areas of potentially significant vernal pool habitats to scrub shrub and herbaceous cover types and 46.20 acres of forest to scrub shrub and herbaceous cover types within Inland Wading Bird and Waterfowl habitat. The proposed project as a whole will cross 820 streams.

C. Current Use of Site: Most of the project (approximately 98 percent) is located within or adjacent to existing transmission corridors. Some of those corridors will be widened to accommodate additional transmission lines. The applicant will construct approximately 6.4 miles of new corridor. The project area is a mixture of forests, fields, uplands and wetlands. Many streams and rivers bisect the corridors. Significant vernal pools and Inland Wading Bird and Waterfowl Habitats are also found within the transmission corridors. Proposed substations and substation expansions will be located in a variety of habitats, primarily a mixture of forests and fields.

D. Public Interest: While the application was being reviewed, the Department received a number of comments from the general public throughout a broad geographic area from within the state of Maine. Those who submitted comments are considered to be "interested parties", as defined in Department Rules, Chapter 2(1)(I), for the purposes of this application review.

The Department received one request from an interested party for the Board of Environmental Protection (BEP) to take original jurisdiction over the proposed project, but it was later withdrawn. The BEP considered assuming jurisdiction over the application. On August 6, 2009, in accordance with Chapter 2 (17), "Rules Concerning

the Processing of Applications and Other Administrative Matters", the BEP determined that the application does not involve a policy, rule, or law that has not previously been interpreted, or an important policy question that the BEP has not resolved or which requires re-examination, and that it is not an application of substantial interest.

Given the size and scope of the proposed project, the Department held three public meetings pursuant to 38 M.R.S.A. §345-A(5). The purpose of these meetings was to provide all interested parties with an opportunity to present their concerns to the Department and submit information into the Department's record. The Department held a public meeting on September 15, 2009 at the Troy Howard Middle School in the Town of Belfast. Approximately seven people were in attendance at the meeting, two of whom presented oral comments. The Department held a public meeting on September 16, 2009 at Lewiston City Hall in the City of Lewiston. Approximately ten people were in attendance at that meeting, three of whom presented oral comments. The Department held a public meeting on September 17, 2009 at Saco City Hall in the City of Saco. Approximately eight people were in attendance at that meeting, two of whom presented oral comments. The Department accepted all information that was presented into the record and subsequently received additional letters and supplemental documents, raising questions and concerns regarding specific aspects of the proposed project. Overall, 21 people submitted letters (one letter was signed by 29 people) or information into the licensing record.

2. TITLE, RIGHT OR INTEREST:

The applicant demonstrated title, right, or interest in the properties proposed for development or use by submitting copies of deeds, leases, easements, options for purchase, and copies of transmission line profiles and plans. This documentation indicates that the applicant owns the properties, has obtained easements on the properties, or has secured an option to buy the properties for most of the proposed project area. The applicant stated that a small number of properties proposed for development or use on various segments have not been obtained; however, negotiations with landowners will continue until the lands are acquired or the appropriate rights have otherwise been acquired for each parcel.

In accordance with 35-A M.R.S.A. §3136 and Chapter 372 (9)(D) of the Department's Site Law Rules, the applicant states that it has eminent domain authority to take lands necessary for the project and that it will use that authority if necessary land or rights cannot be obtained through agreements with public and private landowners. However, the applicant can not use its eminent domain authority until the Maine Public Utilities Commission (PUC) has issued its Certificate of Public Convenience and Necessity (CPCN) for the proposed project.

The Department finds that the documentation submitted by the applicant is credible and demonstrates a right to the reasonable use of the properties and adequate duration and terms for that use for the proposed project and its associated uses sufficient for the processing of this application. This finding is based in part on the applicant's representation that provided the applicant obtains a PUC Certificate of Public

Convenience and Necessity, it has the ability and intent to use the eminent domain power to acquire sufficient title, right, or interest. Therefore, the Department finds that the applicant demonstrated sufficient title, right, or interest in all of the properties which are proposed for development or use provided that the applicant submits to the Bureau of Land and Water Quality (BLWQ) a copy of an approved Certificate of Public Convenience and Necessity issued by the PUC prior to exercise of eminent domain power. Prior to construction on each segment, the applicant must submit to the BLWQ a redacted copy of all deeds, leases, and easements for that segment. The applicant must indicate, on a tax map, which properties it intends to apply eminent domain authority over and work may not begin on those properties or any other properties for which the applicant has not acquired ownership or usage rights, until the applicant has submitted proof that eminent domain authority has been applied or those rights have been obtained.

3. FINANCIAL CAPACITY:

The total cost of the project is estimated to be $1.55 billion which includes $113,000,000 designated for pollution controls. Central Maine Power Company (CMP) is a wholly owned subsidiary of Energy East Corporation, which is a wholly-owned subsidiary of Iberdrola S.A., one of the largest energy companies in the world based on market capitalization.

CMP will use several different methods to finance the project including cashing in some medium-term notes, borrowing from a joint revolving credit facility, and/or utilizing equity capital through the retention of earnings and from equity capital infusions from Iberdrola through Energy East. The applicant submitted a copy of the Iberdrola 2008 Annual Report which indicates that Iberdrola has adequate funds to construct the project.

CMP is also a member of ISO New England (ISO-NE), which operates the region's bulk power system and oversees the regional bulk power marketplace. Under the ISO-NE tariff agreement, most bulk transmission projects are considered regional investments and, accordingly, are designated Pool Transmission Facilities (PTFs). The costs of construction and maintenance of PTFs are shared with other participating New England utilities and their customers.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with state environmental standards.

4. TECHNICAL ABILITY:

The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also has retained the services of TRC Companies Inc., Power Engineers, Terrence J. Dewan & Associates, and ExPonent, all of which are professional firms with expertise in various areas appropriate for this project, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

5. NOISE:

The applicant hired Dr. William Bailey of ExPonent and TRC Engineers, LLC to study and model proposed transmission line audible noise and proposed substation sound levels for the proposed substations of the MPRP project and to compare the model results to operational standards pursuant to the Site Law, Chapter 375 §10.

Chapter 375 § (10)(B)(1) states that "when a development is located in a municipality which has duly enacted by ordinance an applicable quantifiable noise standard, which... (1) contains limits that are not higher than the sound level limits contained in this regulation by more than 5 dBA, and (2) limits or addresses the various types of noises contained in this regulation or all types of noise generated by the development, that local standard, rather than this regulation, shall be applied..."

In those municipalities without a local noise standard, the proposed project is required to meet the Department's noise regulations. Chapter 375 §10 of the Department's noise regulations applies hourly sound pressure level limits ($L_{Aeq\text{-}Hr}$) at facility property boundaries and at nearby protected locations. Chapter 375 §10 (G) (16) defines a protected location as "any location accessible by foot, on a parcel of land containing a residence or approved subdivision...." In addition to residential parcels, protected locations include but are not limited to schools, state parks, and designated wilderness areas.

The hourly equivalent level resulting from routine operation of a development is limited to 75 dBA at any development property boundary as outlined in Chapter 375 § 10 C (1) (a) (i). The hourly equivalent sound level limits at any protected location varies depending on local zoning or surrounding land uses and existing (pre-development) ambient sound levels. At protected locations within commercially or industrially zoned areas, or where the predominant surrounding land use is non-residential, the hourly sound level limits for routine operation are 70 dBA daytime (7:00 a.m. to 7:00 p.m.) and 60 dBA nighttime (7:00 p.m. to 7:00 a.m.). At protected locations within residentially zoned areas or where the predominant surrounding land use is residential, the hourly sound level limits for routine operation are 60 dBA daytime and 50 dBA nighttime. In addition, where the daytime pre-development ambient hourly sound level is equal to or less than 45 dBA and/or nighttime ambient hourly sound level is equal to or less than 35 dBA, quiet location limits apply. For such "quiet locations", the hourly sound level limits for routine operation are 55 dBA daytime and 45 dBA nighttime. In all cases, nighttime limits at a protected location apply at the property line of a protected location or up to 500 feet from sleeping quarters when the property line is greater than 500 feet from a dwelling.

Transmission Lines: For electrical transmission lines, audible noise is relative to conductor (wire) size. The applicant proposes to use conductors that under dry conditions are noise free. In high humidity and storm conditions, these same conductors will produce a slight crackling sound. Audible noise levels were modeled for the operations of existing 12.5 kV, 34.5 kV, 115 kV and 345 kV transmission lines and for the operation of the proposed 345 kV and 115 kV transmission lines and the re-rated/upgraded lines for the proposed project. The applicant's study concludes that under

both dry conditions and high humidity/storm conditions, the audible noise at the edge of the right-of-ways will be below the Department's noise standards for quiet locations. Re-rated lines are not subject to the Department's noise standards because they are exempt from the Site Law.

Substations: The applicant proposes to add equipment to several existing substations, such as circuit breaker switches and capacitor banks that emit low levels of noise on an intermittent and infrequent basis. Noise monitoring was conducted for all new substations and for existing substations that are proposed to add significant noise producing equipment. Sound level measurements were conducted by TRC Engineers, LLC. Measurements were taken continuously over five-day periods between August and November 2008 with sound level meters, known as RION NL-31 monitors. Modeling of the sound level contours was performed using DataKustik GmBH CadnaA software. There were no measurable strong winds or precipitation during any of the monitoring events and temperatures ranged from 24 to 81 (in degrees Fahrenheit).

Sound level studies were conducted at Albion Road Substation in Benton, Coopers Mills Substation in Windsor, Larrabee Road Substation in Lewiston, Maguire Road Substation in Kennebunk, Monmouth Substation in Monmouth and Raven Farm Substation in Cumberland. Because no additional noise producing equipment will be added to Belfast Substation in Belfast, Highland Substation in Warren, Livermore Falls Substation in Livermore Falls, Maine Yankee Substation in Wiscasset, Surowiec Substation in Pownal, Orrington Substation in Orrington and Spring Street Substation in Westbrook, no noise studies were conducted at these substations. Results of the noise studies are as follows:

a. Albion Road Substation, Benton: The applicant modeled the sound which would be generated from the proposed placement of two new 345 kV transformers; the model included consideration of the existing topographic features of the site and surrounding areas and their reflecting or barrier effects. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H) and the Town of Benton's quantifiable noise standards. The local standard applies the 45 dBA nighttime limit at the property line of a protected location regardless of the distance between a project property line and a protected location. Because this standard is not more than 5 dBA higher than Department regulations, the municipal standards are applicable.

   The ambient noise monitoring study in the area of proposed Albion Road Substation revealed that the pre-construction hourly average daytime sound level is 42.7 dBA. The nighttime average sound level is 37.0 dBA. Results of the noise monitoring study concluded that predicted sound levels for construction and operation of the proposed substation are in compliance with all applicable Department and local standards. Moreover, the Town of Benton reviewed the applicant's sound level study and all other aspects of the proposed project within the limits of the municipality. The town issued an approved conditional use permit on October 8, 2009 for the construction of the Albion Road Substation.

b. Coopers Mills Substation, Windsor: The applicant modeled the sound which would be generated from the proposed placement of two new 345 kV transformers and one

new 115kV transformer. The model included consideration of existing topographic features of the site and surrounding areas and their reflecting or barrier effects. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H). The Town of Windsor does not have a local quantifiable noise standard.

The ambient noise monitoring study in the area of proposed Coopers Mills Substation in Windsor revealed that the pre-construction hourly average daytime sound level at two different locations range between 40.1 dBA and 41.3 dBA. The nighttime average sound level ranges between 33.1 dBA and 35.4 dBA. Therefore, the nearest protected locations are considered to be quiet locations under the Department Rules. The applicable hourly sound level standard for the proposed substation is 55 dBA during the day and 45 dBA during the night, measured at the protected location, the residential property line, unless the house is located greater than five hundred feet away, in which case a sound limit of 55 dBA is applicable at the property boundary and 45 dBA applied at the location of the residence. Predicted noise levels for the substation exceed Department noise standards; therefore, noise control measures for the proposed substation are required to achieve compliance. The applicant proposes to construct a reflective barrier that partially encloses the 345 kV transformer located to the southwest of the site. The barrier will be 13 feet tall and is located 6 feet from the transformer to allow for maintenance. The applicant modeled the sound produced from this substation and included the reflective barrier as described above. The applicant contends that the construction of this barrier will reduce sound levels at protected locations and the project will be in compliance with the Department's noise standards. Based on the applicant's predictive model and the inclusion of the reflective barrier, the Department finds that the Cooper's Mill substation will meet the noise standards.

c. Larrabee Road Substation, Lewiston: The applicant modeled the expected sound generated from two proposed new 345 kV transformers and one new 115 kV transformer; the model included consideration of the existing topographic features of the site and surrounding areas and their reflecting or barrier effects. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H) and the City of Lewiston's quantifiable noise standards. The local standard applies a limit of 50 dBA at all hours at the proposed project's property line. Because this standard is not more than 5 dBA higher than Department regulations, the municipal standards are applicable.

The ambient noise monitoring study in the area of the proposed Larrabee Road Substation in Lewiston revealed that the pre-construction hourly average daytime sound level at two different locations range between 43.5 dBA and 44.1 dBA. The nighttime average sound level ranges between 38.9 dBA and 39.0 dBA. The applicant's sound level study concluded that no sound control measures would be required to achieve compliance with the City of Lewiston's noise standards for operating conditions of the proposed substation.

d. Maguire Road Substation, Kennebunk: The applicant modeled the sound expected to be generated from the proposed placement of one new 345 kV transformers; the model included consideration of the existing topographic features of the site and surrounding areas and their reflecting or barrier effects. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H) and the Town of Kennebunk's quantifiable noise standards. The local standard requires that sound levels from any source within the town as measured at a property line shall not exceed sound level limits of 55 dBA and 45 dBA for daytime and nighttime respectively. Because this standard is not more than 5 dBA higher than Department regulations, the municipal standards are applicable.

The ambient noise monitoring study in the area of proposed expansion of the existing Maguire Road Substation in Kennebunk revealed that the pre-construction hourly average daytime sound level at two different locations range between 41.7 dBA and 41.9 dBA. The nighttime average sound level ranges between 32.7 dBA and 36.0 dBA. Predicted noise levels for the substation exceed municipal noise standards; therefore, noise control measures for the proposed substation are required to achieve compliance. To achieve compliance, the applicant proposes to construct a two-sided sound barrier to the west and south of the project site. In addition, the applicant proposes to alter the property boundary and retain 3.2 acres of the adjacent Day Brook compensation parcel. By retaining this land, the property line will be moved outside the 45 dBA sound contour limit. The retained land will remain undeveloped and function as conservation land. Specific details of the Day Brook compensation parcel are discussed in Finding 18.

e. Monmouth Substation, Monmouth: The applicant modeled the sound expected to be generated from two proposed 115 kV transformers; the model included consideration of the existing topographic features of the site and surrounding areas and their reflecting or barrier effects. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H) and the Town of Monmouth's quantifiable noise standards. The local standards require that sound from a development not exceed 55 dBA during daylight hours and 45 dBA during nighttime hours. Because these standards are not more than 5 dBA higher than Department regulations, the municipal standards are applicable. Because the proposed substation will operate during the day and night, the applicant designed the substations to meet the 45 dBA nighttime limit.

The applicant proposes to construct the substation adjacent to the existing Days Corner Substation, which will be dismantled once the new substation is constructed. The ambient noise monitoring study in the area of proposed Monmouth Substation in Monmouth revealed that the pre-construction hourly average daytime sound level is 45.6 dBA. The nighttime average sound level is 42.7 dBA. Predicted noise levels for the substation exceed municipal noise standards; therefore, noise control measures for the proposed substation are required to achieve compliance. To achieve compliance, the applicant proposes to construct a two-sided wall on the western-most transformer and a three-sided wall between the eastern-most transformer and the existing residences. Based on the applicant's predictive model and the inclusion of the two-

sided wall on the western transformer and a three-sided wall on the eastern transformer, the Department finds that the Monmouth substation will meet the noise standards

f. Raven Farm Substation, Cumberland: The applicant modeled the expected sound generated from the proposed placement of two new 345 kV transformers and one new 115kV transformer. Existing topographic features of the site and surrounding areas and their reflecting or barrier effects were considered. Sound level measurements were taken in accordance with the requirements of Chapter 375(10)(H). The Town of Cumberland does not have a local quantifiable noise standard.

The ambient noise monitoring study in the area of the proposed Raven Farm Substation in Cumberland revealed that the pre-construction hourly average daytime sound level at two different locations range between 46.3 dBA and 46.6 dBA. The nighttime average sound level ranges between 42.7 dBA and 42.8 dBA. Because the average daytime sound levels are above 45 dBA and the average nighttime levels are above 35 dBA, the area is not considered to be a "quiet area" under the Department rules, Chapter 375. Therefore applicable hourly sound level standard for the proposed substation is 60 dBA during the day and 50 dBA during the night, measured at the protected location, the residential property line. Based on results of the applicant's model, the Department finds that the average sound levels will be below the applicable limits and no noise control measures are required to meet Department Standards.

The Department received comments from two citizens and the Pownal Planning Board regarding noise at the Surowiec Substation. The comments request that the Department review the existing and proposed noise at the Surowiec Substation. The Pownal Planning Board stated that as a result of the decommissioning of Maine Yankee and the introduction of new power sources into the grid, the use of the existing inductors located at the Surowiec Substation has increased from one to two times per year to 10 – 20 times per week. These inductors are not currently sound shielded and the sound produced exceeds the Department's noise standards. The Town of Pownal has an existing noise ordinance that requires a limit of 60 dBA at the property boundary, and noise generated by the Surowiec Substation currently exceeds the Town's ordinance. The Pownal Planning Board argues that the area should be regulated under Chapter 375 as a quiet area where existing ambient levels are below 45 dBA during the day and 35 dBA at night. The Town of Pownal Planning Board further requests that the Department hold a public hearing on the sound issue at the Surowiec Substation to address the Town's concerns and issues regarding the noise level standards. The Planning Board states that the applicant has the ability to comply with the Department's noise standards for the construction of new substations and therefore it should have the ability to meet the same standards at existing substations.

The applicant stated that the Surowiec Substation was constructed prior to January 1, 1970, and is therefore not subject to the Department's noise limits, and that the proposed project does not add any noise producing equipment at this substation. Independent of this application, and as a result of the complaints, the applicant is conducting its own

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noise studies at the Surowiec Substation so that it can better understand the problem. It is the applicant's intention to be in compliance with the local standards. The applicant stated that currently the Surowiec substation is the only substation in this area with inductors. As part of the MPRP project the applicant proposes to construct inductors at two other substations in this part of the state. The addition of inductors at these other two substations will result in less use of the inductors at the Surowiec Substation.

Department Rules, Chapter 375 § (10)(B)(3), state that "This regulation does not apply to existing developments or portions of existing developments constructed prior to 1-1-70," and the applicant stated that it does not propose to add any new noise producing equipment at the Surowiec Substation. Therefore, the Department finds that the existing and continued noise produced at the Surowiec Substation is not regulated under Chapter 375 § (10). The Department does not intend to hold a public hearing on this issue. The Department has encouraged the applicant to study the noise problem at the Surowiec Substation and to work with the Town of Pownal to resolve local noise issues.

Based on its analysis of the evidence submitted by the applicant, the Department finds that the applicant has made adequate provision for the control of excessive environmental noise from the proposed project provided that a 13 foot tall reflective barrier is constructed adjacent to the southwestern 345 kV transformer at the Coopers Mills Substation, a sound barrier is constructed to the west and south of the Maguire Road Substation, 3.2 acres of the Day Brook compensation parcel is retained by the applicant, and sound barriers are constructed at the western-most transformer and between the eastern-most transformer and the existing residences at the Monmouth Substation.

6. SCENIC CHARACTER:

The NRPA requires an applicant to demonstrate that the proposed activity would not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses. The pertinent regulation promulgated under the NRPA, Chapter 315, requires the applicant to demonstrate that a proposed activity will not unreasonably interfere with the existing scenic and aesthetic uses of a scenic resource and only applies to activities in, on, over or adjacent to a protected natural resource. Under the Site Law, an applicant must demonstrate that the development would not adversely affect scenic character of the surrounding area. The pertinent regulation promulgated under the Site Law, Chapter 375 §14, requires the applicant to demonstrate that the development will not have an unreasonable adverse effect on the scenic character of the surrounding areas.

In order to assess the potential scenic impact of the Maine Power Reliability Program to scenic resources and existing public scenic and aesthetic uses, the applicant submitted a visual impact assessment (VIA) for the project area which was prepared by Terrence J. DeWan & Associates (TJD&A). The VIA focuses on views from publicly accessible viewpoints, primarily roads, trails, public lands and water bodies. The VIA is composed of a narrative that includes an evaluation of existing vegetative buffers where present and their effectiveness in screening the project from nearby land uses and scenic resources, photographs of existing conditions and photo simulations. It evaluates three visual

elements: landscape compatibility, scale contrast, and spatial dominance. It also includes an evaluation of possible mitigation strategies at each location.

Transmission Lines:

The transmission lines cross many major roads, including Interstate 95, and many major waterbodies. Because of the length of the transmission line portion of the project, the applicant divided the transmission line project into segments and completed a VIA for each segment where physical changes will be occurring. The applicant proposes to construct a number of structures within the transmission line corridor in addition to transmission lines. Proposed structures include 345 kV H-frame structures, 115 kV and 345 kV single pole structures, and lattice structures. For those areas that were determined to have a potential adverse effect on scenic resources, the applicant proposes several mitigation strategies, which include vegetative buffer plantings, consideration of structure design, use of strategically placed earthen berms, and preservation of existing vegetation. The applicant proposes to remove 6.4 miles of existing 115 kV and 34.5 kV transmission line in the towns of West Gardiner, Litchfield, Monmouth, Farmingdale, and Gardiner. The applicant proposes to maintain existing vegetation wherever practicable within the transmission line corridor by careful layout of access roads and monitoring of practices during construction. Planting plans for visual buffers will be implemented within 90 days after completion of construction of each segment and substation, or in the event that construction is completed in the winter or summer months, the plants must be installed prior to the end of the next spring or fall season. Mitigation strategies are outlined in Table 6-1 in the application and discussed in detail below.

a. Segment 1: Segment 1 extends from the Orrington substation in Orrington to the junction of Segments 3 and 4 for a distance of 15.5 miles. The applicant proposes to expand the width over much of the corridor within Segment 1 from 270 feet to 370 feet. Proposed structures in this segment include a 345 kV transmission line with H-frame structures and single pole structures, and a 115 kV transmission line with single pole structures. The applicant also proposes constructing four lattice structures to cross the Penobscot River. H-frame structures are typically 75 feet tall; single pole structures will vary in height from 125 feet to 135 feet tall. The lattice structure used to cross the waterbody is typically 300 feet tall. This segment currently has an existing 345 kV line which will remain in place.

   An existing gas pipeline and utility cable are co-located in the corridor of this segment. Existing conditions in the vicinity of the segment are predominantly woodland, farmland, and residential. The VIA evaluated the following scenic resources: Sedgeunkedunk Stream, Fields Pond, the Penobscot River, Marsh Stream, and recreational ball fields in Frankfort. In the northern portion of the segment, there will be a minor increase in overall visibility from adjacent homes in areas where vegetation will be removed within the corridor. In the southern portion of the segment, some of the vegetation between the corridor and six abutting homes will be removed. The additional height of single pole structures along Staples Road in this portion will have a strong visual impact on the surrounding residential neighborhood. Current recreational users are accustomed to seeing the existing structures and

conductors; therefore, a minimal visual impact is expected to recreational users. The Frankfort Ball Fields on Loggins Road will be rotated and shifted in order to accommodate the proposed additional width of the transmission corridor. The applicant does not anticipate that these actions will affect the recreational use of the area. Plantings for visual roadside buffers are proposed for three areas within this segment. Buffers will be planted along Fields Pond Road at the Orrington substation, on the east side of Route 1A in Winterport, and on the south side of a stream and between a railroad line and a stream along Stream Road in Frankfort. The Department finds that the applicant must plant visual buffers along Fields Pond Road at the Orrington substation, on the east side of Route 1A in Winterport, and on the south side of a stream and between a railroad line and a stream along Stream Road in Frankfort.

b. Segment 2: The applicant proposes to replace an existing 115 kV line supported by lattice structures with two 115 kV lines on single pole structures. The existing lattice structures are approximately 100 feet tall. The single pole replacement structures will be approximately 110 feet tall.

Segment 2 is located in an industrial area near Verso Paper Mill in Bucksport. The transmission line is minimally visible to the general public due to the intensity of the surrounding industrial land uses. The VIA evaluated the following scenic resources: the Penobscot River, the Bucksport Waterfront Walkway, Fort Knox State Historic Site in Prospect, the Verona boat launch, and the observation tower of the Penobscot Narrows Bridge in Prospect. The applicant states that compared to the scale of the surrounding industrial landscape, the change in scenic character will be insignificant and visual impact will be negligible. No visual roadside buffers are proposed for Segment 2. The Department finds that Segment 2 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

c. Segment 3: The applicant proposes to construct a 24.45 mile 345 kV transmission line from the junctions of Segment 1 and 4 in Frankfort to the junction of Segment 9 and Section 85 in Detroit. The line will be constructed on the north side of an existing 115 kV line. Within this segment, the applicant also proposes to replace existing H-frame structures of the 115 kV line with single pole structures and widen the existing corridor from 218 feet to 305 feet. Both the single pole 115 kV replacement structures and proposed 345 kV H-frame structures will be approximately 75 feet tall. An approximately 0.2 mile portion of the segment, east of the Detroit substation, contains a 115 kV transmission line and a 34.5 kV transmission line within the existing 218 foot wide corridor. Both of these lines will remain.

Land use in the vicinity of the segment consists mainly of woodland, farmland, and rural residences. There are no major population centers within the viewshed of this segment. The closest town centers are more than 1 mile from the transmission line corridor's viewshed. The VIA evaluated the following scenic resources: Marsh

Stream, Thurlow Brook, and Chase Stream in Monroe, Carlton Pond Waterfowl Production Area in Troy, and East Branch Sebasticook River in Detroit.

The applicant anticipates minimal to moderate visual impact on scenic resources and the recreating and working population. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for three areas within this segment. Buffers will be planted along the west side of Dixmont Road in Monroe, in front of the Dixmont Town House on the southeast side of Route 202 in Dixmont, and along both sides of Route 100 on the north side of Detroit substation in Detroit. The Department finds that the applicant must plant visual buffers along the west side of Dixmont Road in Monroe, in front of the Dixmont Town House on the southeast side of Route 202 in Dixmont, and along both sides of Route 100 on the north side of Detroit substation in Detroit.

d. Segment 4: The applicant proposes to construct a 115 kV transmission line built to 345 kV standards in an existing 270 foot wide corridor. The transmission line will be built between the intersections of Segments 1, 3, and 4 to a point where it meets Segment 6. The existing 345 kV H-frame structures are 75 feet tall. The proposed 115 kV H-frame structures built to 345 kV standards will be identical in design and height as the existing structures.

An existing gas pipeline and utility cable are co-located in the corridor of this segment. Land use in the vicinity of the corridor consists mainly of woodland, farmland, and rural residences. There are no major population centers and the closest town centers are greater than one mile from the corridor's viewshed. The VIA evaluated the following scenic resources: Swan Lake State Park, Swan Lake, and Toddy Pond. The applicant anticipates negligible to minimal visual impact on scenic resources and the recreating and working population. The Department finds that Segment 4 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

e. Segment 6: The applicant proposes to construct a 115 kV transmission line built to 345 kV standards in an existing 270 foot wide corridor. The transmission line will be built from Segment 4 at the Waldo/Brooks town line to the Maxcys Substation in Windsor. The existing 345 kV H-frame structures are 75 feet tall. The proposed 115 kV H-frame structures built to 345 kV standards will be identical in design and height as the existing structures.

An existing gas pipeline and utility cable are co-located in the corridor of this segment. Land uses in the vicinity of the corridor consist mainly of woodland, farmland, and rural residences. There are no major population centers and the closest villages to the corridor are Morrill, South Montville, North Searsmont and Somerville. The VIA evaluated the following scenic resources: Passagassawakeag River in Waldo, Simmons Brook and Smiths Millpond in Morrill, Bartlett Stream, Quantabacook Lake, Ruffingham Meadow State Game Management Area, and the St. George River in Searsmont, Appleton Bog Preserve in Appleton, Medomak River in

Liberty, and Sheepscot River, Lovejoy Stream, James Pond, and French Pond in Somerville Plantation.

The applicant anticipates that the proposed project will have a negligible to minimal impact on scenic resources and the recreating and working population. To mitigate potential visual impacts, plantings for a visual roadside buffer and an earthen berm are proposed for two areas within this segment. Buffers will be planted along the north side of Weymouth Road in Morrill and a low earthen berm will be constructed on the southwest side of Coopers Mills Road in Windsor to visually buffer the substation. The Department finds that the applicant must plant visual buffers along the north side of Weymouth Road in Morrill and construct a low earthen berm on the southwest side of Coopers Mills Road in Windsor.

f. Segment 9: The applicant proposes to construct a 19.4 mile 345 kV transmission line from the Detroit substation to the Albion Road substation in Benton. The majority of the corridor contains one existing 115 kV transmission line. Approximately 1.8 miles of this segment currently contains two 115 kV lines with H-frame structures within a 218 foot wide corridor. Other proposed construction activities include replacement of the existing 115 kV H-frame structures with single pole structures, construction of the 345 kV line on H-frame structures on the west side of the existing line, widening the north side of the existing 218 foot wide corridor to 265 feet. The transmission line structures (H-frame and single pole) to be constructed will be approximately 75 feet tall. A 1.3 mile portion of the segment between Mutton Lane and Interstate 95 in Clinton will be located in a re-routed corridor.

The majority of the existing corridor runs parallel to Interstate 95. Land use in the vicinity of most of the corridor north of Clinton consists mainly of woodland, farmland, and rural residences. At the southern end of the segment, the landscape is more open with a large percentage of agricultural land. Land use in this area includes residential subdivisions, industrial uses, forestland, and agriculture. There are two population centers within the viewshed of this segment: Pittsfield and Clinton. The VIA evaluated the following scenic resources: Sebasticook River/Douglas Pond, Pinnacle Park, two Interstate 95 rest areas in Pittsfield, and the Sunkhaze National Wildlife Refuge and Sebasticook River in Benton. The Gordon Audubon Sanctuary in Palmyra is approximately one mile north of the Detroit substation and will not be affected by construction activities of this segment.

The applicant anticipates that the proposed project will have a minimal to moderate impact on scenic resources and the recreating and working population. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for four areas within this segment. Buffers will be planted along the southeast side of Dogtown Road in Detroit, the southwest side of Route 152 in Pittsfield, both sides of Mutton Lane in Clinton, and on the south side of East Benton Road near the Albion Road substation in Benton. The Department finds that the applicant must plant visual buffers along the southeast side of Dogtown Road in Detroit, the southwest side of Route 152 in Pittsfield, both sides of Mutton Lane in Clinton, and on the south side of East Benton Road near the Albion Road substation in Benton.

g. Segment 10: The applicant proposes to construct a 345 kV transmission line, rebuild an existing 115 kV transmission line using single pole structures, and add a second 115 kV transmission line in an existing 225 foot wide corridor. The proposed lines will run from the Albion Road substation in Benton to the Coopers Mills Road substation in Windsor. The applicant also proposes to clear land within the existing transmission line corridor. Forty feet of land will be cleared on the west side of the existing corridor or 50 feet of land will be cleared on the east side of the corridor. The 345 kV line will be supported by H-frame and single pole structures; the 115 kV line will be supported by single pole structures. The single pole replacement structures for the 115 kV line and the 345 kV H-frame structures will be approximately 75 feet tall. In areas where single pole structures will be used for the 345 kV line, the structures will be approximately 125 feet tall.

Land use in the vicinity of the corridor consists mainly of woodland, farmland, and rural residences. There are no major population centers within the immediate viewshed of the segment. The VIA evaluated the following scenic resources: the Sunkhaze National Wildlife Refuge in Benton, Lovejoy Pond in Albion, Dutton Pond on the Albion/China town line, Hunter Brook, China Lake, Evans Pond, and Meadow Brook in China, and Hewitt Brook and three crossings of the West Branch Sheepscot River in Windsor. The applicant anticipates that the proposed project will have a minimal to moderate impact on most of the scenic resources and the recreating and working population. Near Dutton Pond, existing 115 kV H-frame structures will be replaced with taller single pole structures. The presence of the taller structures is expected to have a severe visual impact; however, the applicant stated that the viewing population at Dutton Pond is very limited. The increase in height and number of structures is anticipated to have a moderate to strong visual impact on the smaller streams that intersect the corridor. The applicant stated that riparian vegetation preserved along these streams during construction will minimize visual impacts of the transmission lines. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for two areas within this segment. Buffers will be planted along both sides of Albion Road in Benton and the south side of Route 3 in China. The Department finds that the applicant must plant visual buffers along Albion Road in Benton and along the south side of Route 3 in China.

h. Segment 10A: The applicant proposes to re-rate a 4.9 mile 115 kV transmission line, from the Winslow substation on Benton Avenue in Winslow to the new Albion Road substation in Benton. The western 1.5 mile portion of the Segment 10A transmission corridor includes two existing 115 kV H-frame transmission lines, typically 45 feet tall, and two or three 34.5 kV transmission lines, typically 35 feet tall, in a cleared transmission corridor that ranges from 300 to 375± feet wide. The majority of the transmission corridor (3.4 miles) includes two existing 115 kV H-frame transmission lines, typically 45 feet tall, in a cleared transmission corridor that is typically 225± feet wide. The proposed MPRP construction in Segment 10A will upgrade one of the existing 115 kV transmission lines to single-pole structures, typically 75± feet tall.

Land use in the immediate vicinity of most of the transmission line is predominantly woodland, farmland, and low density rural residential. There are portions of the transmission corridor in northern Winslow and on the east side of the Sebasticook River in Benton where the surrounding landscape is more open agricultural land. There are no major population centers within the immediate viewshed of Segment 10A. The VIA evaluated the following scenic resources: Sunkhaze National Wildlife Refuge – Benton Division, the Benton Riverfront Park on the western edge of the Sebasticook River, and the Sebasticook River in Benton. The existing transmission line is not visible from Sunkhaze or the Benton Riverfront Park. The applicant states there should be minimal visual impact to the working population in the area, and recreational trail users and boaters in the Sebasticook River. The Department finds the Segment 10A upgrade will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and will not have an unreasonable adverse effect on the scenic character of the surrounding area.

i. Segment 14: Proposed construction in Segment 14 includes a second 115 kV transmission line from the Larrabee Road substation in Lewiston to the Livermore Falls substation in Livermore Falls. This line will be supported by single pole structures. The existing 400 foot wide corridor currently contains a 115 kV H-frame line which will remain. The existing 115 kV H-frame structures are approximately 45 feet tall; the new single pole structures will be approximately 65 feet tall. The applicant also proposes to increase the width of the existing cleared corridor from 150 feet to approximately 225 feet.

A Maine Central Railroad line parallels the southern section of the corridor in this location. Several residential subdivisions and mobile home parks exist near the transmission line corridor. Land use in the immediate vicinity of the corridor consists mainly of woodland, farmland, and rural residences. There are two major population centers within the viewshed of Segment 14: Lewiston and Livermore Falls. The VIA evaluated the following scenic resources: Stetson Brook and Allen Pond in Greene, the Dead River and the Land for Maine's Future land in Leeds, Scott Brook, Hunton Brook, Clay Brook, and Redwater Brook in Livermore Falls, the Tolla Wolla Wildlife Management Area in Livermore, and the Androscoggin River in Lewiston, Greene, Leeds, and Livermore Falls. The applicant anticipates that the proposed project will have a negligible to minimal impact on most of the scenic resources and the recreating and working population. A moderate visual impact may be expected on small streams which intersect the corridor due to the increase in height and number of transmission structures. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for two areas within this segment. Buffers will be planted along both sides of Merrill Road in Lewiston and on the south side of Fish Street in Leeds. The Department finds that the applicant must replant visual buffers along Routes 202/11/100 in Greene and Route 133 in Livermore Falls if it is necessary to remove the existing white pine buffers in these locations during construction.

j. Segments 15 and 15 Alt.: Segment 15 Alt. is proposed as an alternate route for a portion of Segment 15. It has been designed to remove the scenic impacts resulting

from existing poles located in or adjacent to the Tacoma Lakes (Woodbury Pond) and Cobbosseecontee Stream. Most of the proposed 15 Alt. transmission line corridor is presently wooded. There are several open fields and hedgerows near road crossings. The applicant proposes to clear a 250-foot wide corridor and construct a 115 kV transmission line on single pole structures and a 345 kV transmission line on H-frame structures in the new corridor. The lines will be supported on H-frame poles and will be approximately 75 feet high. Segment 15 Alt. will cross four public roads and Cobbosseecontee Stream (approximately 1.5 miles north of the existing crossing). Land uses in the vicinity of the proposed route consist mainly of woodland with scattered single family homes in rural settings. The western end of Segment 15 Alt. will be located in the southerly side of the Woodbury Bird Sanctuary, a private 160-acre preserve owned by the Stanton Bird Club of Lewiston. The scenic character of portions of the Woodbury Bird Sanctuary will be negatively affected by the construction of Segment 15 Alt. Despite the scenic impacts, the Stanton Bird Club agreed to sell CMP the land required for Segment 15 Alt. in exchange for ownership of the 241 acre Mud Pond compensation parcel, located at the opposite end of the existing sanctuary. Segment 15 Alt. will cross Cobbosseecontee Stream at the West Gardiner/Litchfield town line, approximately 1.3 miles upstream of its present crossing and 0.8 miles downstream of Collins Mill Road. Because of the sinuosity of the stream, adjacent vegetation and topography, recreational users of Cobbosseecontee Stream will be able to view the new crossing approximately 0.4 miles from the actual crossing itself. The segment will also be visible from Cobbosseecontee Lake, Little Purgatory Pond and Woodbury Pond in Litchfield. The VIA states that the impact on Cobbosseecontee Lake, Little Purgatory Pond and Woodbury Pond will be minor.

Segment 15Alt. will cross four public roads, Town House Road in West Gardiner, Litchfield Road in West Gardiner, Neck Road in Litchfield and Hardscrabble Road in Litchfield. In the locations of these crossings, there will be a visual impact as a result of the new structures and transmission lines.

The removal of the existing 115 kV and 34.5 kV transmission lines in the existing 6.4 mile long transmission corridor (a portion of Segment 15) will have a positive visual impact on views from the Hallowell- Litchfield Road bridge over Cobbosseecontee Stream and on the southern portion of Little Purgatory Pond. The view from the eastern end of Woodbury Pond, Whippoorwill Road, the Woodbury Pond boat ramp and Little Purgatory Pond will benefit significantly from the removal of the existing 115 kV and 34.5 kV transmission lines and the re-growth of vegetation as further discussed in Finding 18.

As a result of the installation of Segment 15 Alt., many crossings of transmission lines over roads in Segment 15 will be removed. Three towns are affected: West Gardiner, Litchfield, and Monmouth. In West Gardiner, the removal of the transmission line corridor will affect High Street and Spears Corner Road at Spears Corner; First Street; Johnson Lane; and Beckwith Lane and Hallowell-Litchfield Road at Cobbosseecontee Stream. In Litchfield, the removal of the transmission line corridor will affect Old Mill Road, Hallowell Road, and Maple Drive, Whippoorwill

Road, Heron Drive, Island Lane, Woodbury Drive, the access road to Woodbury Pond Park, and Leblanc Drive, all near Woodbury Pond. In Monmouth the removal of the transmission line corridor will affect Stevens Drive. In each of these locations, motorists currently see a 115 kV transmission line supported by H-frame transmission structures, typically 45 feet tall, in a cleared transmission line corridor. With the exception of High Street and Spears Corner Road in West Gardiner, the access drive to Woodbury Pond Park in Litchfield, and Stevens Drive in Monmouth, motorists also currently see a 34.5 kV transmission line in the same transmission line corridor. The removal of these transmission lines should have a positive visual impact for motorists and others who use these roads. The positive visual impacts will be most noticeable from Hallowell-Litchfield Road and Whippoorwill Road, where the public roads cross or are immediately adjacent to waterbodies. Segment 15 activities will also include the removal of a 34.5 kV transmission line in Farmingdale, Gardiner, and West Gardiner. In Farmingdale, the removal of the transmission line will affect Bowman Street and Northern Avenue. In Gardiner and West Gardiner, the transmission line follows the municipal boundary and crosses at Highland Avenue (Gardiner) and High Street (West Gardiner). In West Gardiner, the transmission line removal will affect the Maine Turnpike, Moose Hill Road, Libby Lane, Rockwood Estates, Hinkley Road, and Spears Corner Road. The removal of this transmission line should have a positive visual impact for the motorists and others who use these roads.

To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for 13 areas within this segment. Existing buffers on both sides of Hankerson Road in Chelsea will be reinforced. Buffers will be planted along both sides of Route 9 in Chelsea; buffers will be planted to avoid blocking views to the Kennebec River. Non-capable species will be planted on Browns Island along Route 201 in Farmingdale to minimize contrast in color and texture as seen from Route 9 and Route 201 and the river. Buffers will be planted along both sides of Interstate 95 in Farmingdale. Buffers will be planted along existing drainage ways (avoiding interference with existing agricultural uses) of Town House Road in West Gardiner. The meetinghouse site on Litchfield Road in West Gardiner will be restored with native vegetation; a buffer consisting of informal groupings of large shrubs will be installed. Homes sites along Neck Road in Litchfield will be restored with native vegetation; a buffer consisting of informal groupings of large shrubs will be installed. Buffers consisting of informal groupings of large shrubs will be planted along the east side of Peace Pipe Road in Litchfield. Homes sites along Hardscrabble Road in Litchfield will be restored with native vegetation; a buffer consisting of informal groupings of large shrubs will be installed. Buffer plantings will be installed along both sides of Town Farm Road in Monmouth. Buffer plantings will be installed around the proposed Monmouth Substation on South Monmouth Road in Monmouth. A buffer plan will be developed to replace farm buildings and existing vegetation on Route 132 in Wales. Existing non-capable species currently growing within the transmission line corridor will be reinforced along Lane Road in Greene. The Department finds that the applicant must reinforce and install buffers as described above at the roadside crossings within Segment 15/15 Alt, and prior to the start of

construction on Segments 15 or 15 Alt. the applicant must develop the above-described buffer plan for the Route 132 crossing in Wales.

The VIA concludes that the Segment 15 upgrade which consists of removing 6.4 miles of Segment 15 and construction Segment 15 Alt. should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area. The Department finds that the new Segment 15 Alt. transmission line corridor will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

k. Segment 16: Segment 16 currently has two 345 kV transmission lines and one 115 kV line located within a corridor that varies in width from 270 feet to 525 feet. For this segment, the applicant proposes to construct new lattice structures to support one of the existing 345 kV lines as it crosses the Abagadasset River, replace the smaller lattice structures with taller lattice structures at the crossing of the Kennebec River, remove the 115 kV line, and replace the existing 115 kV H-frame structures with single pole structures to support one of the existing 345 kV lines. The lattice structures at the Abagadasset River crossing will be approximately 140 to 165 feet tall; the lattice structures at the Kennebec River crossing will be approximately 330 feet tall. The proposed single pole structures will be approximately 140 feet tall.

The existing transmission structures are visible from the nearby roads and Abagadasset River, and they are a dominant physical element in the viewshed in many areas of the segment. The landscape is relatively flat, with small streams, large parcels of farmland, blocks of woodlands, and large areas of tidal flats. A considerable amount of land within the segment is preserved and maintained by local land trusts and state agencies. The VIA evaluated the following scenic resources: the Abagadasset River in Bowdoinham; the Kennebec River; Merrymeeting Bay; Chopps Creek; the Merrymeeting Bay Wildlife Management Areas in Bowdoinham, Woolwich, and Dresden; the Robert P.T. Coffin Wild Flower Sanctuary and the Merrymeeting Fields Preserve in Woolwich; Beatrice B. Baxter Memorial Forest in Topsham; and the Steve Powell Wildlife Management Area on Swan Island.

The applicant anticipates that the proposed project will have a minimal to moderate impact on most of the scenic resources and the recreating and working population. A moderate visual impact may be expected on small streams which intersect the corridor due to the increase in height and number of transmission structures. To mitigate potential impacts, plantings for visual roadside buffers are proposed for three areas within this segment and in the town of Bowdoinham. Buffers will be planted along both sides of Center's Point Road, along the northeast side of the western end of Brown's Point Road, and along both sides of the eastern end of Brown's Point Road. The Department finds that Segment 16 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

l. Segment 17: Segment 17 currently contains two 115 kV transmission lines within a 340 to 400 foot wide existing transmission line corridor that runs from Gulf Island substation in Lewiston to Surowiec substation in Pownal. For this segment, the applicant proposes to construct a 345 kV transmission line on the western side of the existing corridor. For most of the segment, the proposed 345 kV line will require 100 feet of additional vegetative clearing on the west side of the corridor. In four locations, single-pole structures will be used at the request of local residents. An additional 39 to 70 feet of clearing will be required in these locations. South of the Androscoggin River in Durham and Pownal, no additional clearing will be required except for the removal of an existing hedgerow between an existing pipeline and the transmission line. All of the existing 45 foot tall 115 kV H-frame structures will remain in place, except in a one mile portion where structures will be replaced with 75 foot tall single pole structures. The new 345 kV H-frame structures will be approximately 75 feet tall; the new 345 kV single pole structures will be approximately 120 feet tall.

Land use in the immediate vicinity of the corridor consists mainly of woodland, farmland, and low to medium density rural residential areas. The more populated area of Lewiston is within 0.5 miles of the segment and the village of North Pownal is approximately 0.5 miles to the east of the segment. The VIA evaluated the following scenic resources: the Thorncrag Bird Sanctuary and Randall Ball Fields in Lewiston; the Androscoggin River, Durham River Park, Durham Boat Launch, and Runaround Pond in Durham; and Bradbury Mountain State Park in Pownal. The applicant anticipates that the proposed project will have a minimal to moderate impact on most of the scenic resources and the recreating and working population. At three road crossings in Lewiston, where new single pole structures will replace existing H-frame structures, the structures are anticipated to have a strong visual impact. To mitigate the potential impacts, plantings for visual roadside buffers are proposed for four areas within Segment 17. Buffers will be planted along both sides of Sabattus Street and both sides of Interstate 95 in Lewiston, along the river side of Riverside Drive in Auburn, and on the south side of Fickett Road in Pownal. The Department finds that the applicant must plant visual buffers along both sides of Sabattus Street and both sides of Interstate 95 in Lewiston, along the river side of Riverside Drive in Auburn, and on the south side of Fickett Road in Pownal.

m. Segment 18: The applicant proposes in the northern portion (2.6 miles) of Segment 18 to construct a 345 kV line between a pair of existing 115 kV lines and a pair of existing 345 kV lines and replace the existing 115 kV H-frame structures with single pole structures. Proposed construction in the southern portion (4.5 miles) of this segment includes installation of a 345 kV line on the west side of the existing corridor where two 115 kV lines are present. The single pole 115 kV replacement structures and the new 345 kV H-frame structures will be approximately 75 feet tall. The width of the corridor for the northern portion of Segment 18 is 460 feet; the width of the corridor for the southern portion of the segment is 400 feet.

Land use in the immediate vicinity of the corridor consists mainly of woodland, farmland, and low to medium density rural residential areas. The VIA evaluated the following scenic resources: the Royal River, Chandler Brook, and Wescustogo Park in North Yarmouth; and the Pineland Public Reserved Land in Pownal. The applicant anticipates that the proposed project will have a negligible to minimal impact on most of the scenic resources and the recreating and working population. The addition of the 345 kV line will moderately increase the overall visual impact of the line as motorists cross under the lines. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for four areas within Segment 18. Buffers will be planted along both sides of North Road and on the east side of Allen Road in Pownal, and on both sides of New Gloucester Road and Gray Road in North Yarmouth. The Department finds that the applicant must plant visual buffers along both sides of North Road and on the east side of Allen Road in Pownal, and on both sides of New Gloucester Road and Gray Road in North Yarmouth.

n. Segment 19: The applicant proposes to construct a 5.3 mile 345 kV transmission line supported by H-frame structures from Segment 18 to Raven Farm substation in Cumberland. The transmission line will be constructed on the southwest side of an existing corridor. A 3.8 mile portion of the corridor contains one 34.5 kV line with a 100 foot to 135 foot clearing; a 1.5 mile portion of the corridor contains two 34.5 kV lines within a 135 foot clearing. The applicant also proposes to clear an additional 120 to 155 feet of vegetation within the corridor. The proposed 345 kV H-frame structures will be approximately 75 feet tall.

   Land use in the immediate vicinity of the corridor consists mainly of woodland and medium density residential areas. The VIA evaluated the following scenic resources: Knight's Pond and Val Halla Golf Course in Cumberland; Village Park, Veteran's Park, Old Town House Park, and Memorial School in North Yarmouth; and Yarmouth High School and Harrison Middle School in Yarmouth. The applicant does not anticipate that any of these scenic resources would be significantly affected by Segment 19, and the recreating and working population will be minimally to moderately impacted by the transmission lines in this segment. Plantings for visual roadside buffers are proposed for two areas within Segment 19. Buffers will be planted along the north side of Hillside Road in Yarmouth and on both sides of Cumberland Road in North Yarmouth. The applicant intends to replicate existing non-capable species within the 34.5 kV corridor along Cumberland Road. The Department finds that the applicant must plant visual buffers along the north side of Hillside Road in Yarmouth and on both sides of Cumberland Road in North Yarmouth.

o. Segment 24: For this segment, the applicant proposes to construct a 345 kV transmission line from the South Gorham substation in Gorham to the Maguire Road substation in Kennebunk. This line will be constructed adjacent to two existing 115 kV lines and supported by 75 foot tall H-frame structures. The majority of the corridor is currently 300 feet wide and will not be widened. In Arundel and Kennebunk, for a distance of 10 miles, the corridor will be widened an additional 40

to 80 feet to meet a full 300 foot corridor width in order to accommodate the new line.

Land use in the immediate vicinity of the corridor consists of woodland, farmland, commercial and residential subdivisions, mobile home parks, and low density residential areas. The VIA evaluated the following scenic resources: Fuller Farm and Broadturn Farm in Scarborough, Saco Heath, the Saco River, the Kennebunk River, and the Mousam River. The applicant states that potential visual impacts to scenic resource are anticipated to be minor, and potential visual impacts to residents and the recreating and working population are anticipated to be minor to moderate. To mitigate potential visual impacts, plantings for visual roadside buffers are proposed for three areas within Segment 24. Buffers will be planted along the south side of Route 5 in front of the substation in Saco, on both sides of Route 35 in Arundel, and on both sides of Webber Hill Road in Kennebunk. The Department finds that the applicant must plant visual buffers along the south side of Route 5 in front of the substation in Saco, on both sides of Route 35 in Arundel, and on both sides of Webber Hill Road in Kennebunk.

p. Segment 27: Segment 27 consists of two different sub-segments; the existing transmission line corridor currently varies in width from approximately 150 feet to 340 feet. The northern portion (10.7 miles) of Segment 27 extends from the Maguire Road substation in Kennebunk and the Quaker Hill substation in North Berwick and contains two existing 115 kV transmission lines. The applicant proposes to construct one new 345 kV transmission line supported by H-frame structures on the east side of the corridor in the northern portion of this segment. The H-frame structures will be approximately 75 feet tall. An 8.7 mile portion of this area will require 75 feet of additional vegetative clearing. A 0.6 mile area will require removal of a strip of capable species (trees and shrubs capable of growing to heights that will interfere with transmission wires) located between the existing corridor and an existing gas pipeline. For approximately 1.4 miles near the Quaker Hill substation, approximately 20 feet of land on the west side of the corridor will be cleared of capable species of vegetation.

The southern portion (8.5 miles) of Segment 27 extends from the Quaker Hill substation and the Three Rivers substation in Eliot and contains one existing 115 kV transmission line supported by single pole structures. For this portion of the segment, the applicant proposes to construct one new 345 kV transmission line on the east side of the existing corridor. The line will be supported by H-frame structures for the first 6.5 miles south of the Quaker Hill substation. The remaining 2.0 miles of the line will be supported by single-pole structures. Moreover, the applicant proposes to re-locate and change the structures of the existing 115 kV line from H-frame structures to single pole structures. The line will be moved to an area between its existing location and the new 345 kV line. The H-frame structures for the 345 kV line will be approximately 75 feet tall, the single pole structures for the 345 kV line will be approximately 95 feet tall, and the single pole structures for the relocated 115 kV line will be approximately 75 feet tall.

An existing underground gas pipeline is located near the edge of the transmission line corridor throughout the majority of Segment 27. Land use in the vicinity of the corridor consists mainly of undeveloped woodland, open fields, several quarries and low density residential areas. There are several residential subdivisions adjacent to the corridor. The VIA evaluated he following scenic resources: Kennebunk Plains Wildlife Management Area and Branch Brook in Kennebunk; the Eastern Trail, Wells Heath, and West Stream in Wells; Dennett Brook, Great Works River, Hussey Brook, and views of Mt. Agamenticus in North Berwick; the Eastern Trail, Knights Brook, Knights Pond, Great Works River, and Lord Brook in South Berwick; and Shoreys Brook in Eliot.

The applicant states that potential visual impacts to scenic resources are anticipated to be minor to moderate; and potential visual impacts to residents and the recreating and working population are anticipated to be minor. Some vegetation may be removed between two buildings within the Woodland Hills Condominiums in South Berwick. Moreover, wooden structures will be replaced with metal structures at this location. Due to the changes in scale and material, the potential visual impact to the Woodland Hills Condominiums is anticipated to be moderate to strong. The applicant proposes to avoid interference with recreation areas within the housing complex and plant buffers where existing trees are to be removed. To mitigate potential visual impacts, roadside buffers are proposed for four other areas within Segment 27. Buffers will be planted along the north side of Maguire Road in Kennebunk. Buffers will be planted along the north side of Dennett Road in North Berwick and the north side of Emery's Bridge Road in South Berwick if the existing white pine buffers must be removed. The existing buffers along Route 236 in South Berwick will be preserved and enhanced near the shoulder of the road. The Department finds that the applicant must plant visual buffers along the north side of Dennett Road in North Berwick and the north side of Emery's Bridge Road in South Berwick if white pine buffers are removed. The Department further finds that the existing buffers along Route 236 in South Berwick must be enhanced near the road shoulder.

q. Segment 29: This segment extends from the junction of Segment 11 in Woolwich to the Maine Yankee substation in Wiscasset. Construction activities are proposed in three portions of the segment. The northern portion (1.7 miles) of Segment 27 currently contains three 345 kV lines and two 115 kV lines in a 550 foot wide cleared transmission line corridor. Two of the 345 kV lines and both of the 115 kV lines are supported by lattice structures. For the northern portion, the applicant proposes to relocate one of the 345 kV lines to the east side of the corridor and support the line with H-frame structures. An additional 100 feet of capable vegetation will be cleared on the east side of the corridor. Proposed H-frame structures will be approximately 75 feet tall.

The middle portion (0.4 miles) of Segment 29 currently contains four 345 kV transmission lines and two 115 kV transmission lines supported by three sets of lattice structures and one set of H-frame structures. The width of the corridor in this portion is currently 550 feet wide. The applicant proposes to replace the lattice structures of the 115 kV lines with single pole structures, replace the lattice structures

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of one of the 345 kV lines with H-frame structures, and clear an additional 85 feet of capable vegetation on both sides of Birch Point Road in Wiscasset. Proposed single pole structures will be approximately 80 feet tall, and H-frame structures will be approximately 75 feet tall.

The southern portion of Segment 29 currently has four 345 kV transmission lines supported on two sets of lattice structures and one set of H-frame structures. The width of the corridor in this portion varies from 370 feet to 432 feet. The applicant proposes to relocate one of the 345 kV lines to the west side of the corridor and support the line on new H-frame structures. Proposed H-frame structures will be approximately 75 feet tall. The applicant also proposes to clear an additional 85 feet of land on the west side of the corridor.

Land use in the vicinity of the corridor consists mainly of woodland, farmland, and rural residences. There are commercial highway uses along the Route One corridor and industrial development near the proposed Maine Yankee substation. The VIA evaluated the following scenic resources: the Back River in Wiscasset and Westport Island and Montsweag Brook in the Wiscasset/Woolwich town line. The applicant states that potential visual impacts to scenic resources are anticipated to be negligible to minor; and potential visual impacts to residents and the recreating and working population are anticipated to be minor to moderate. No visual roadside buffers are proposed for Segment 29. The Department finds that Segment 29 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

r. Segment 30A: The applicant proposes to re-rate CMP Section 167A, a 1.8 mile 115 kV transmission line in the town of Westbrook between Methodist Road and the Prides Corner Substation on Pride Street. The existing 115 kV H-frame transmission structures, which are typically 45 feet tall, will be replaced with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor. A 34.5 kV transmission line that is located within the same transmission line corridor will not be affected.

Land use in the vicinity of Segment 30A is a mixture of suburban residential, commercial, storage, gravel pits, and woodland. The VIA identified no scenic resources that would be affected by the re-rate of Segment 30A. The applicant anticipates no visual impact to recreational trail users, any other segment of the public, or the one waterbody crossed by Segment 30A (Mill Brook, a tributary to the Presumpscot River). The Department finds that the Segment 30A re-rate will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed.

s. Segment 34A: The applicant proposes to re-rate Section 67A, a 9.9 mile 115 kV transmission line in the towns of Oakland, Fairfield, Benton, Waterville, and Winslow. This work will involve the replacement of the existing 115 kV H-frame

transmission structures, which are typically 45 feet tall, with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor.

Land use in the vicinity of Segment 34A is a mixture of rural residential, institutional, agriculture, and woodland. There are no major population centers within close proximity to the transmission line corridor. The VIA evaluated the following scenic resources: Messalonskee Stream in Oakland and Waterville (2 crossings), Fish Brook in Fairfield (2 crossings), the Kennebec River (Fairfield/Benton town line), and the Sunkhaze Meadow National Wildlife Refuge – Benton Division. Since there will be no appreciable change to the appearance or scale of the transmission line, the applicant anticipates no visual impact to these scenic resources or affected populations in the vicinity including motorists, residents of 33 +/- nearby residences, recreational users, and local workers. The Department finds that the Segment 34A re-rate should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed.

t. Segment 34B: The applicant proposes to re-rate Section 83B, a 4.0 mile 115 kV transmission line in the towns of Cornville and Madison. This work will involve the replacement of the existing 115 kV H-frame transmission structures, which are typically 45 feet tall, with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor.

Land use in the vicinity of Segment 34B is primarily forestland, with some agriculture and rural residential use. The VIA evaluated the following scenic resources: Smith Pond, and West Branch Wesserunsett Stream in Cornville. The applicant anticipates no visual impact to these scenic resources, the snowmobile trail ITS 87 (which intersects Segment 34B near Madison/Cornville town line), or the small streams that intersect the transmission line corridor (e.g., Cold Brook, West Branch of the Wesserunsett Stream, and Bog Brook). The applicant states that there will be no appreciable change to the appearance or scale of the transmission line, so there should be no visual impact to motorists, residents of the 10 +/- nearby homes, recreational users of the corridor, and the working population in the area who already see the existing transmission lines at times during the year. The Department finds that the Segment 34B re-rate will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed.

u. Segment 34C: The applicant proposes to re-rate Section 83C, a 3.3 mile 115 kV transmission line in the Town of Skowhegan. This work will involve the replacement of the existing 115 kV H-frame transmission structures, which are typically 45 feet tall, with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor.

Land use in the vicinity of Segment 34C is a mixture of rural residential, agriculture, and woodland. The 115 kV transmission line terminates at the Sappi Fine Paper Mill. There are no major population centers within close proximity to the transmission line corridor. The VIA evaluated one scenic resource, which was the Kennebec River. The applicant states there will be no appreciable change to the appearance or scale of the transmission line, so the Segment 34C re-rate should not have an impact on the visual character of the Kennebec River, or on motorists, residents of the three +/- nearby homes, recreational users of the corridor, and the working population in the area who already see the existing transmission lines at times during the year. The Department finds that the Segment 34C re-rate will not unreasonably interfere with existing scenic and aesthetic uses of the scenic resource within its viewshed.

v. Segment 35: Segment 35 extends from Maxcys substation in Windsor to the Highland substation in Warren and currently contains an existing 115 kV transmission line on H-frame structures in a corridor that varies in width from 150 feet to 190 feet. A 34.5 kV line is also located in the corridor for a distance of 2.3 miles south of the Maxcys substation. The applicant proposes to construct a new 115 kV line on single pole structures and replace the existing H-frame structures of the 115 kV line with single pole structures. The proposed single pole structures will be approximately 75 feet tall.

Land use in the immediate vicinity of the corridor consists mainly of woodland, farmland, and low density residential areas. There are also gravel pits, blueberry barrens, and residential subdivisions along the corridor. The VIA evaluated the following scenic resources: the Sheepscot River on the Windsor/Jefferson town line; Travel Brook, Travel Pond, Black Brook, Brann Brook, Haskell Hill, West Branch Davis Stream, and Davis Stream/Pitcher Brook confluence in Jefferson; Meadow Brook, Medomak River, Medomak Pond, Little Medomak Pond, and Alford Brook in Waldoboro; and the St. George River, Seven Tree Pond, and the West Branch Oyster River in Warren. Potential visual impacts to scenic resources, residents, and the recreating and working population are anticipated by the applicant to be minor. No visual roadside buffers are proposed for Segment 35. The Department finds that Segment 35 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

w. Segment 35B: The applicant proposes to re-rate Section 88, a 6.1 mile 115kV transmission line in the towns of Chelsea and Augusta. This work will involve the replacement of the existing 115 kV H-frame transmission structures, which are typically 45 feet tall, with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor.

Land use in the vicinity of Segment 35B is a mixture of rural and lakefront residential, woodlands, and agriculture. There are no major population centers within close proximity to the transmission line corridor. The VIA evaluated the following

scenic resources: the Alonzo H. Garcelon Wildlife Management Area, Lower Togus Pond, Togus Stream, Greeley Pond, and Riggs Brook in Augusta. Since there will be no appreciable change to the appearance or scale of the transmission line, the applicant anticipates no visual impact to these scenic resources or affected populations in the vicinity including motorists, residents of 16 +/- nearby residences, recreational users, and local workers. The Department finds that the Segment 35B re-rate should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed.

x. Segment 38B: The applicant proposes to re-rate Section 61A, a 10.6 mile 115 kV transmission line in the towns of Auburn and Minot. This work will involve the replacement of the existing 115 kV H-frame transmission structures, which are typically 45 feet tall, with new H-frame structures that will be 5 to 15 feet taller. The new structures will be in approximately the same location as the ones that are being replaced. Re-rating will not involve any other physical changes to the transmission line corridor.

Land use in the vicinity of Segment 38B is a mixture of rural residential, agriculture, and woodland. At the southern end of the transmission line corridor, the surrounding land is more developed, with residential subdivisions, commercial, and industrial development in the City of Auburn. The VIA evaluated the following scenic resources: Lake Auburn in Auburn and Lapham Brook in Minot. The applicant states that Segment 38B will not change appreciably in appearance or scale, so the proposed re-rate should not have a visual impact on the surrounding area or on motorists, residents of 20 +/- nearby homes, recreational users of the corridor, and the working population in the area who already see the existing transmission lines at times during the year. The applicant anticipates no visual impact on small streams that intersect the transmission line corridor (e.g., Lapham Brook). The Department finds that the Segment 38B re-rate will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed.

y. Segment 39: Segment 39 extends from the Livermore Falls substation in Livermore Falls to the Rumford Industrial Park substation in Rumford. The existing corridor currently contains one, two, or three 115 kV H-frame transmission line at various points. The width of the corridor varies from 150 feet to 437 feet. Construction activities are proposed in three different sub-segments. The applicant proposes to construct a 115 kV line between two existing 115 kV lines in the southernmost portion of the segment for a distance of 1.1 miles. The new line will be supported by H-frame structures that will be approximately 45 feet tall.

For approximately 18.4 miles of the segment, the applicant proposes to construct a new 115 kV line on single pole structures and replace the existing 115 kV line H-frame structures with single pole structures. The single pole structures will be approximately 75 feet tall.

The westernmost portion of Segment 39 is approximately 1.3 miles in length and currently contains three 115 kV transmission lines. For this portion, the applicant

proposes to construct one new 115 kV transmission line on single pole structures. The applicant also proposes to replace the H-frame structures of two of the existing 115 kV lines with single pole structures. The third 115 kV line on H-frame structures will remain. The single pole structures will be approximately 75 feet tall.

Land use in the vicinity of the corridor consists mainly of forestland, rural residential areas, the Verso Paper Mill in Jay, and the Industrial Park in Rumford. The VIA evaluated the following scenic resources: Mosquito Brook and Sevenmile Stream in Jay; Ludden Brook in Canton; Worthley Brook, Upper Stoney Brook, and Spears Stream in Peru; Wyman Brook in Rumford; and the Androscoggin River. The applicant states that potential visual impacts to scenic resources are anticipated to be minor, and potential visual impacts to residents and the recreating and working population are anticipated to be minor to moderate. To mitigate potential visual impacts, one visual roadside buffer is proposed for Segment 39. A visual buffer will be planted in the vicinity of the Livermore Falls substation on Moose Hill Road in Livermore Falls. The Department finds that the applicant must plant a visual buffer in the vicinity of the Livermore Falls substation on Moose Hill Road in Livermore Falls.

z. Segment 40A: The applicant proposes to rebuild 8.8 miles of an existing 115 kV transmission line in Bucksport, Prospect, Stockton Springs, and Searsport between the substation at the Verso Paper Mill in Bucksport and the Searsport Substation on Old County Road. The existing 115 kV H-frame transmission line that will be rebuilt is located in a cleared transmission line corridor that varies between 190± and 258± feet in width. The existing 115 kV H-frame structures in Segment 40A are typically 45 feet tall. The single-pole replacement structures will typically be 75± feet tall. There will be no change to the lattice structures that are located on either side of the Penobscot River crossing in Bucksport and Prospect. A second 115 kV transmission line, similar in design and height, is located in a 3.1 mile portion of Segment 40A. A 34.5 kV transmission line is located in the remaining 5.7 miles of Segment 40A.

Land use in the immediate vicinity of the transmission line is predominantly woodland, farmland, and low density rural residential. Segment 40A terminates at the substation at the Verso Paper Mill, Bucksport in an industrial landscape that is comprised of large-scale papermaking buildings, storage tanks, overhead conveyors, pulpwood loading and storage areas, and numerous smaller structures. Outside of Bucksport the closest village center is Prospect, 0.2 miles to the northwest. The VIA evaluated the following scenic resources: the Penobscot River, the Bucksport Waterfront Walkway, Fort Knox State Historic Site in Prospect, the Verona Boat Launch, the observation tower of the Penobscot Narrows Bridge, Marsh Stream, and the Howard L. Mendall Wildlife Management Area (WMA) in Prospect. With the exception of Marsh Stream and the Howard L. Mendall WMA, the applicant anticipates no visual impacts to these scenic resources. With regard to Marsh Stream and the Howard L. Mendall WMA, the applicant states there should be a relatively minor visual impact from Segment 40A on the South Branch of Marsh Stream and the southernmost end of the Howard L. Mendall Wildlife Management Area.

The applicant also anticipates minimal to no visual impact on the 18 residential properties that are adjacent to or within view of the transmission line corridor, recreational trail users, and the village of Prospect. The applicant states that motorists on Route 174 (Fort Knox Road) crossing the South Branch of Marsh Stream may see the tops of the new, taller single-pole transmission structures over the marshland that surrounds Marsh Stream on the south side of the road. This view is somewhat constricted by topography between the roadway and the transmission line corridor, and should only be apparent for several seconds. The Department finds that the Segment 40A upgrade will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and will not have an unreasonable adverse effect on the scenic character of the surrounding area.

aa. Segment 40B: The applicant proposes to construct a new 115 kV transmission line in Belfast between the existing Belfast Substation on East Waldo Road to an existing transmission line in an adjacent transmission line corridor (approximately 1,100 feet to the southeast of East Waldo Road). The existing 115 kV H-frame structures in Segment 40B are typically 45 feet tall and located within a 200± foot wide maintained transmission line corridor. The proposed 115 kV transmission line will be constructed with similar H-frame structures ranging in height from 43 to 57 feet. There is also a 34.5 kV transmission line located within the existing corridor on structures typically 35 feet in height. The new transmission line will require approximately 100 feet of additional clearing within the existing transmission line corridor on the west side of the corridor along its 1,600± foot length.

Nearby land uses include rural residential, forestland, and the existing Belfast Substation. Downtown Belfast is located approximately 1.5 miles to the south. The VIA identified no scenic resources within the viewshed of Segment 40B. Scenic resources within one mile of the site are Wescot Stream (0.3 miles to the east) and Passagassawakeag River (0.2 miles to the southeast). The applicant states that neither of these resources will be affected by Segment 40B. The applicant anticipates no visual impact on motorists, and minimal to no visual impact on the residential properties that are within the viewshed of Segment 40B. The Department finds that Segment 40B should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

bb. Segment 41: Segment 41 extends from Segment 15 near Spears Corner Road in West Gardiner for four miles east to near the West Gardiner/Gardiner town line. The applicant proposes to remove a 34.5 kV transmission line from within the existing corridor of this segment. Due to its proximity to Segments 15 and 15 Alt., removal of this line will occur in concurrence with construction activities proposed for Segment 15 and 15 Alt.. Land use in the vicinity of the corridor consists mainly of rural residential areas, residential subdivisions, agriculture, and mobile home parks. The applicant states that the removal of the transmission line will not have a visual impact on motorists. The Department finds that the removal of Segment 41 will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources

within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

Based upon results of the VIA for all of the segments, construction within all segments of the transmission line corridor is not anticipated to unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and is not anticipated to unreasonably affect the scenic character of the area provided that the applicant adhere to the roadside buffer planting plan as discussed above.

Substations:

The applicant prepared a VIA for each substation where physical changes are proposed. Where necessary, the applicant employed several mitigation strategies to reduce potential visual impact. Mitigation strategies include, but are not limited to, preservation of stands of woodland, plantings of vegetative buffers, and incorporation of earthen berms. Schematic plans that show mitigation strategies for the proposed substations are outlined in Exhibit 6-5 of the application and are discussed in detail below.

1. Albion Road substation, Benton: This new substation will be located off Albion Road in the Town of Benton between Segments 9 and 10. The substation will occupy approximately 28. 2 acres on a mostly wooded 60 acre parcel of land. An existing vegetative buffer between 150 feet and 300 feet will remain around the north, west, and east sides of the substation. The applicant proposes to plant a 75 foot wide buffer at the southwest corner of the substation between the limit of grading and an abutting agricultural field. The applicant also proposes to construct a curved gravel access road on the north side of Albion Road. The applicant states that the curved nature of this road will limit views into the facility. The closest scenic resource, Sunkhaze National Wildlife Refuge – Benton Division, is approximately 2,500 feet west of the substation. Additional nearby land uses include residential subdivisions, forestland, agriculture, and existing transmission lines. The applicant states that potential visual impacts to scenic resources, residents, and the recreating and working population are anticipated to be minor. In order to minimize potential visual impacts, the applicant located the substation adjacent to an existing transmission line, did not site the substation within the viewshed of scenic resources, sited the substation 650 feet from the main road to preserve existing vegetation, curved the access road to prevent a direct view to the substation, and will plant a buffer on the southwest corner of the site. The Department finds that the applicant must plant a visual buffer on the southwest corner of the Albion Road substation site.

2. Belfast substation, Belfast: This existing substation proposed for expansion is located on a 0.9 acre site off East Waldo Road in the Town of Belfast. The applicant proposes to expand the substation yard by 0.2 acres and install additional equipment. The expansion area is currently vegetated with grasses and small shrubs. An existing vegetative buffer is present to the north and south of the substation. Nearby land uses include rural residential areas, forestland, and existing transmission lines. The nearest scenic resources are Wescot Stream and Passagassawakeag River. Neither of these resources will be visually affected by the expansion. The applicant states that

potential visual impacts to residents and the recreating and working population are anticipated to be negligible to minor. The primary mitigation strategies that the applicant will utilize to reduce visual impacts include siting the proposed project adjacent to the existing substation and adding a vegetative buffer. The Department finds that the applicant must plant a visual buffer between the substation and East Waldo Road in Belfast.

3. Coopers Mills Road, Windsor: This new substation will be located 1,000 feet off of Coopers Mills Road at the junction of Segments 6, 10, 15, and 35, and will occupy approximately 16.9 acres of developed area. Existing vegetative buffers will be preserved on most sides of the substation except where the surrounding vegetation is interrupted by existing transmission lines. Nearby land uses include rural residential areas, forestland, agriculture, and existing transmission lines. The closest scenic resource is the West Branch of the Sheepscot River. The applicant states that there will be no views of the substation from this resource. Moreover, the applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be negligible to minor. In order to minimize visual impacts, the applicant sited the substation as far from the main road as possible, co-located the curved access road under an existing transmission line, and located the substation at the junction of several transmission lines. The Department finds that the proposed Coopers Mills Road substation will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

4. Highland substation, Warren: This existing substation proposed for expansion is located on an approximately 1.0 acre parcel of land adjacent to Beechwood Street in the Town of Warren. The applicant proposes to expand the yard by 0.45 acre on the south side of the existing development. All sides of the existing substation are surrounded by vegetation; although the vegetation to the front of the substation is minimal. Nearby land uses include rural residential areas, forestland, and existing transmission lines. The closest scenic resource is the Oyster River in Warren. The applicant states that the existing substation is not visible from the Oyster River. Moreover, the applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be negligible to minor. The primary mitigation strategies that the applicant proposes to utilize to reduce visual impacts are siting the proposed project adjacent to an existing substation and adding additional buffering where existing vegetation is reduced. In order to minimize visual impacts along the road and in front of the substation, the applicant proposes to plant a visual buffer between the existing substation, the expansion area and Beechwood Street. The Department finds that the applicant must plant a visual buffer between the substation and Beechwood Street.

5. Larrabee Road substation, Lewiston: This new substation will be located at the eastern end of Larrabee Road on a 22.7 acre parcel of land. The substation expansion will cause 7.2 acres to be developed. An existing buffer of mixed vegetation will remain around the northwest, north, and south sides of the substation. Land uses in the vicinity of the substation include single family residences, commercial

development, gravel pits, and existing transmission lines. There are no scenic resources within the viewshed of the substation. The applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. In order to minimize visual impacts, the applicant sited the substation adjacent to existing transmission lines and away from the viewshed of any scenic resources. The applicant also proposes to plant additional visual buffers between the end of Larrabee Road and the substation. The Department finds that the applicant must plant a visual buffer between the end of Larrabee Road and the substation.

6. Livermore Falls substation, Livermore Falls: This existing substation proposed for expansion is located at the junctions of Segments 14 and 39 on the south side of Moose Hill Road. The applicant proposes to expand the substation by 2.2 acres approximately 350 feet south of the main road. The expansion will be partially hidden by components of the existing substation. Nearby land uses include rural residential areas, residential subdivisions, forestland, agriculture, and existing transmission lines. There are no scenic resources within the viewshed of the substation. The applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. The primary mitigation strategies that the applicant will utilize to reduce visual impacts are siting the proposed project adjacent to an existing substation and transmission lines, utilizing existing vegetation and the substation to screen the proposed expansion, and planting additional visual buffering between the substation and Moose Hill Road. The Department finds that the applicant must plant a visual buffer between the substation and Moose Hill Road.

7. Maguire Road substation, Kennebunk: This existing substation proposed for expansion is located on the north side of Maguire Road at the junction of Segments 24 and 27. The applicant proposes to expand the substation approximately 1,200 feet north of the main road. The expansion will increase the size of the existing substation by 4.7 acres; however, much of the expansion will be screened from public views by the surrounding vegetation. Land uses within the vicinity of the substation include small residential areas, woodland, and fields. The closest scenic resource is the Kennebunk Plains Wildlife Management Area. The applicant states that any views of the substation would be seen in context with existing transmission lines, and the proposed project will have a minor visual impact on the scenic resource. Moreover, the applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. The primary mitigation strategy that the applicant proposes to utilize to reduce visual impacts is siting the proposed project adjacent to an existing transmission line corridor. The applicant intends to install additional buffer plantings along Route 99 (Webber Hill Road) to mitigate for potential visual impacts from the project. The Department finds that the applicant must plant a visual buffer along Route 99 (Webber Hill Road).

8. Maine Yankee substation, Wiscasset: This existing substation proposed for expansion is located off Old Ferry road on a peninsula surrounded by the Back River on its east, south, and west sides. The applicant proposes to expand this facility to include installation of new 345 kV electrical equipment. The proposed upgrade will

extend the limits of the substation by 2.0 acres of developed area to the west. The existing substation is located within the site of the former Maine Yankee nuclear power plant and is located adjacent to several industrial facilities. Due to the secure nature of the facility, the general public will not be able to view the substation at close distances. The closest scenic resource is the Back River. The applicant states that potential visual impacts to scenic resources, residents, and the recreating and working population are anticipated to be minor. In order to minimize visual impacts, the applicant sited the proposed expansion within an existing industrial area and adjacent to existing transmission lines. The Department finds that the proposed expansion at the Maine Yankee Substation will not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.

9. Monmouth substation, Monmouth: The applicant proposes to construct a new substation on a 2.2 acre site adjacent to the existing Days Corner substation on South Monmouth Road. The applicant proposes to decommission and remove the existing Days Corner substation. Nearby land uses include forestland, agriculture, existing transmission lines, and rural residential areas. The closest scenic resource is Jock Stream. Most of the proposed expansion will occur in an existing field, however some of the buffer along Jock Stream will need to be removed which will result in a moderate to strong visual impact. The applicant proposes to plant a visual vegetative buffer between South Monmouth Road and the substation and along the northern boundary of the substation to minimize adverse visual impacts. The applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. The primary mitigation strategy that the applicant used to minimize potential visual impacts includes locating the facility adjacent to an existing substation and transmission line corridor and outside the viewshed of scenic resources. The Department finds that the applicant must plant a 25 foot wide by 50 foot long buffer along the banks of Jock Stream to mitigate for the visual impacts of the proposed substation for persons recreating on the stream. The buffer must be located in the floodplain wetland and must consist of native shrubs. The buffer must be located along the stream bank and in the northern portion of the transmission right-of-way.

10. Orrington substation, Orrington: This existing substation proposed for expansion is located on an 8.3 acre site off Fields Pond Road. The applicant proposes to upgrade the substation at this location by adding a 345 kV bay within the substation's current footprint. The substation will not require the removal of significant vegetation; however, the applicant proposes to plant additional vegetation between the substation and Fields Pond Road to reduce visibility of the substation. Nearby land uses include single family homes, fields, woodlands, and existing transmission lines. The closest scenic resources are Sedgeunkedunk Stream and Fields Pond. Due to the minimal changes that are proposed, the applicant anticipates that visual impacts to scenic resources, residents, and the recreating and working population are anticipated to be minor. The Department finds that the applicant must plant a visual buffer between the substation and Fields Pond Road in Orrington.

11. Raven Farm substation, Cumberland: The applicant proposes to construct a new substation on a 23.1 acre parcel of land near the existing Elm Street substation off Greely Road. An existing vegetative buffer ranging from 150 feet to 300 feet in width will remain around most of the substation. Nearby land uses consist mainly of single family homes, residential subdivisions, commercial developments, forestland, agriculture, and existing transmission lines. There are no scenic resources within the viewshed of the proposed project site. Approximately 2.3 miles of Greely Road is designated as a Scenic Roadway by the town of Cumberland. The applicant stated that the proposed substation will not be visible from the scenic portion of Greely Road; therefore, no visual impact on that scenic resource is anticipated. Additional visual vegetative buffers will be planted near Greely Road, the substation access road, and around the perimeter of the substation to minimize visual impacts to the surrounding area. The applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. Mitigation strategies employed by the applicant to minimize visual impacts include locating the proposed substation within an existing transmission line corridor and setting the substation 550 feet from the main road. The applicant also proposes to construct and plant a 13 foot tall earthen mound between the substation and Greely Road that will be extended to the northwest in the transmission line corridor. The earthen mound will function as a visual screen. The applicant will also plant a vegetated buffer along the substation entrance road, adjacent to Greely Road and within the bounds of the substation to help reduce visual impacts along Greely Road and to adjacent properties. The Department finds that the applicant must construct and plant the proposed earthen mound between the substation and Greely Road, plant a vegetative buffer along Greely Road and within the bounds of the substation.

12. Spring Street substation, Westbrook: The applicant proposes to expand the west side of this existing substation located on the corner of Spring Street and County Road. The applicant proposes to enlarge the fence surrounding the facility and add a 115 kV bay to the existing substation. The proposed expansion will be set back approximately 500 feet from Spring Street and approximately 100 feet from County Road. Land uses within the vicinity of the substation include agriculture, industrial developments, residential subdivisions, woodland, and existing transmission lines. There are no scenic resources within the viewshed of the substation. The applicant states that potential visual impacts to residents and the recreating and working population are anticipated to be negligible to minor. The primary mitigation strategy that the applicant proposes to utilize to reduce visual impacts includes siting the proposed expansion adjacent to existing transmission lines within an industrial setting and away from scenic resources. The applicant also proposes to plant a vegetative buffer between the substation and Route 22 (County Road) and to enhance the existing buffer between the substation and Spring Street. The Department finds that the applicant must plant a vegetative buffer between the substation and Route 22 and enhance the existing buffer between the substation and Spring Street.

13. Surowiec substation, Pownal: The applicant proposes to expand the north and east sides of this existing substation located on the east side of Allen Road. Nearby land

uses include single family residences, forestland, hayfields, and existing transmission lines. The closest scenic resource is the Bradbury-Pineland Corridor, which is approximately 0.8 miles from the project site. The applicant states that that scenic resource will not be affected by the proposed expansion. The applicant also states that potential visual impacts to residents and the recreating and working population are anticipated to be minor. The applicant proposes to plant a visual buffer between Allen Road and the substation to minimize visual impacts. The primary mitigation strategy employed by the applicant to minimize visual impacts consists of locating the proposed project away from the viewshed of scenic resources and adjacent to an existing substation and transmission line corridor. The Department finds that the applicant must plant a vegetative buffer between the substation and Allen Road.

Based upon results of the VIA for all of the substations, the applicant stated that construction activities associated with the proposed substations should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not unreasonably affect the scenic character of the area provided that the applicant adhere to the roadside buffer planting plan as discussed above.

Based upon results of the VIA for all segments and substations, the applicant's plan for proposed roadside visual buffers, the applicant's mitigation strategies to reduce potential visual impacts, and the project's design and location primarily within an existing transmission line corridor, the Department finds that the applicant has made reasonable accommodation to fit the development into the natural environment and that no aspect of the project will have an unreasonable adverse effect on the scenic character of the surrounding area or existing scenic and aesthetic uses provided that the applicant adhere to the proposed plan for roadside buffers as outlined in Table 6-1 and as depicted in Exhibit 6-5 in the application and that the applicant plant a 25 foot wide by 50 foot long buffer along the bank of Jock Stream, in the northern portion of the transmission line right-of-way. The buffer must be located in the floodplain wetland and must consist of native shrubs.

7. WILDLIFE AND FISHERIES:

The NRPA requires an applicant to demonstrate that the proposed activity would not unreasonably harm any significant wildlife habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life. The pertinent regulation promulgated under the NRPA, Chapter 335, requires the applicant to demonstrate that a proposed activity will not unreasonably harm significant wildlife habitats, including significant vernal pool habitats, and high and moderate value inland wading bird and waterfowl habitats. Under the Site Law, an applicant must demonstrate that the development would not adversely affect wildlife and fisheries. The pertinent regulation promulgated under the Site Law, Chapter 375 §15, requires the applicant to demonstrate that the development will not have an unreasonable adverse effect on the wildlife and fisheries.

The proposed project will cross 820 streams, many of which support cold water fisheries. The project will cross two Outstanding River Segments as defined by the NRPA, and will

cross numerous Class A and Class AA rivers and streams as defined by 38 MRSA Sections 464, the Classification of Maine Waters. The proposed project will also impact significant vernal pool habitats, inland wading and waterfowl habitats, indeterminate value deer wintering areas and rare, threatened and endangered wildlife species habitats.

The Maine Department of Inland Fisheries & Wildlife (MDIFW) reviewed the proposed project and submitted comments to the Department. In its comments, MDIFW stated that the proposed project will impact several inland wading bird and waterfowl habitats, many significant vernal pool habitats, many indeterminate deer wintering areas and a several rare, threatened and endangered species.

MDIFW regional fishery biologists reviewed the application and stated that it typically recommends 100-foot wide undisturbed buffers on all streams to protect fisheries resources. MDIFW stated that the 100 foot undisturbed buffer recommendation is routine for projects involving hard developments, such as buildings and paved areas. MDIFW has been more flexible for soft developments, areas where vegetation will be selectively cut or narrow openings like trails, allowing some vegetation removal. After considering the width of the proposed project, MDIFW recommended 100 foot wide undisturbed buffers on all streams crossed by the project. MDIFW also reviewed and commented on the classification of the streams listed in Exhibit 7-9, the Waterbody Crossing Table. As a result of MDIFW's comments, the applicant revised the Waterbody Crossing Table to include MDIFW's recommendations. The latest version of the Waterbody Crossing Table was last revised January 8, 2010.

The Department analyzed MDIFW's request, however, the nature of the proposed project requires the removal of capable species vegetation within 100 feet of rivers, streams and brooks. In an effort to minimize the impacts to fisheries, the applicant must construct and maintain the project in accordance with the document entitled "Vegetation Management Practices: Maine Power Reliability Program" last revised March 31, 2010 (Amended VMP) and attached as Appendix B to this Order. The document requires 100 foot wide riparian buffers, allowing the removal of capable species within the buffer, for all Class A, AA, outstanding river segments, or rivers, stream and brooks containing threatened or endangered species. It establishes a 25 foot riparian buffer for all other streams. The document restricts the placement of structures to outside of the riparian buffers, and requires the use of travel lanes and the removal of slash in the water and within 50 feet of the stream bank.

In order to reduce potential impacts to fisheries and sensitive wildlife habitats during project construction and maintenance activities, MDIFW recommended that any permanent stream crossings be constructed with the bottom of the culvert embedded six inches into the soil and that the culvert diameter be equal to 1.2 times the stream bank width.

The applicant proposes to use culverts in constructing some of the temporary access roads, as an alternative to using mats and bridges as described in the Amended VMP. The applicant proposes to size temporary culverts to provide an opening of at least three times the cross sectional area of the stream channel and sized to accommodate the 25-

year storm. The applicant states that it will not use culverts for the crossings in streams that support salmon or other coldwater fisheries. The access roads are temporary and the culverts will be removed once the project is constructed. In consideration of the applicant's request and MDIFW's comments, the Department finds that culverts can be installed in streams that are not: Class A or AA waters, outstanding river segments, support salmon or other coldwater fisheries, or streams that contain threatened or endangered species. Culverts for temporary access roads must be installed when the stream channel is dry. The stream may be dammed and pumped around the construction site, and the culverts must be embedded six inches into the soil and sized so that the diameter is equal to 1.2 times the bank full width of the stream. The stream channel must be restored to natural conditions when the culverts are removed. The Amended VMP has been revised to include the installation of culverts under these conditions.

Because of the size and nature of the project, the Department contracted with a consultant to perform an independent review of the natural resources and significant wildlife habitats found along the transmission line corridor. In accordance with its contract, Normandeau Associates reviewed 80% of the proposed transmission line corridor project, approximately 289 miles. The contract specified that it verify resource delineations, specifically, the size and location of freshwater wetlands, the regulatory status of streams/drainage ways and whether a wetland meets the definition of a wetland of special significance. Normandeau Associates submitted reports describing the discrepancies and their location along the transmission line corridor. The applicant received a copy of these reports and conducted subsequent field visits and site surveys. In most instances, the applicant agreed with the Normandeau determination and made the necessary adjustments on its resource maps. In instances where Normandeau Associates and the applicant disagreed, Department staff used information generated by both parties supplemented with site visits to resolve the discrepancy.

The applicant submitted survey information for all vernal pools identified on the project site, including egg mass counts and other information required by the NRPA, Chapter 355, Significant Wildlife Habitat, to determine whether a vernal pool meets the Department's definition of significant. The Department's contract with Normandeau Associates also included a review of significant vernal pool habitats and amphibian breeding areas. The Department required Normandeau Associates to identify any discrepancies associated with the location of significant vernal pools and to review the amphibian breeding areas. (The applicant named areas that may or may not have adequate numbers of amphibian egg masses in amphibian breeding areas (ABAs) if the applicant determined that the area was man-made). The Department wanted another opinion, based on site specific conditions and topography, regarding the origin of these ABAs especially if the ABA met the Department's abundance criteria for amphibian egg masses. Normandeau Associates' reports were submitted to both the Department and MDIFW. The applicant also received a copy of the reports and conducted subsequent field visits and site surveys. In most instances, the applicant agreed with the Normandeau determination and made the necessary adjustments on its resource maps. In other instances, the applicant submitted its own field data to the Department which made decisions regarding resource discrepancies based on the information given and on site visits. MDIFW received all of Normandeau Associates' data in regard to any

discrepancies associated with significant vernal pools and the applicant's follow up field data. In instances where Normandeau Associates and the applicant disagreed, MDIFW submitted comments with its conclusion as to whether the resource in question was a significant vernal pool, a non-significant vernal pool or a potentially significant vernal pool. For the purposes of evaluating the applicant's proposed project, any potentially significant vernal pool will be treated as if it is a significant vernal pool until the applicant submits field data proving otherwise.

As a result of the Department's review of the applicant's vernal pool survey data, in conjunction with the Normandeau review and MDIFW comments, it was determined that eighty-five significant vernal pools and 25 potentially significant vernal pools will be impacted by the proposed project. The applicant conducted surveys for vernal pools during the spring amphibian breeding season in 2007, 2008 and 2009. MDIFW reviewed the applicant's data sheets and submitted comments to the Department. In its December 14, 2009 comments, MDIFW recommended that the applicant consider 22 potentially significant vernal pools located along the property boundary of the transmission line corridor and abutters, as significant vernal pools until specific field data can prove otherwise. MDIFW also recommended that two pools be considered potentially significant vernal pools until specific survey data can be obtained (Segment 1: #D-1-388-381-2 and Segment 6: #C-6-388-104-2, which was identified by Normandeau Associates). MDIFW also commented that three pools, not considered significant by the applicant, are also considered significant vernal pools based on the data available at the time of review. The applicant received a copy of MDIFW's review and responded that it will consider the 22 vernal pools located along the property boundary and the three additional pools as potentially significant vernal pools. The applicant amended its impact numbers and the compensation plan to accommodate for the additional impacts to significant vernal pools. The applicant stated that it will be seeking landowner permission, where necessary, to survey the pools in question during the spring breeding season in 2010. The data sheets will be submitted to MDIFW and the Department, and the applicant intends to modify the proposed compensation plan to accurately reflect the status of these vernal pools if any of them are subsequently found to be not significant.

The Department and MDIFW have developed guidance criteria for determining the non-significance of a vernal pool in cases where the applicant does not have access to the entire the pool area because it is located on a property boundary and the applicant does not have permission to survey the adjacent property. The guidance is as follows:

1) 2/3 or more of the pool area is surveyed, and
2) no fairy shrimp are detected and amphibian indicator egg mass counts do not exceed the following thresholds: a) Wood Frog--20, b) Spotted Salamander--10, or c) Blue-spotted Salamander—5, and
3) documentation is provided by the applicant's consultant that a good faith attempt was made to survey the pool across the property line by contacting the owner, and if permission was not granted, characterize how much of the pool was able to be surveyed from the property line without going onto the adjacent property.

Department staff applied these criteria to the 22 potentially significant vernal pools located along the property boundaries of the project, and determined that four vernal

pools can be considered non-significant. This guidance reduces the number of potentially significant vernal pools located along the property boundary to 18.

Construction of the improvements to the existing transmission line corridor and the construction of a new transmission line corridor will convert 70.21 acres of significant and U.S. Army Corps of Engineers – jurisdictional vernal pool habitat from forest to scrub shrub and herbaceous cover types. It will also convert 13.84 acres of potentially significant vernal pool habitat from forest to scrub shrub and herbaceous cover types. No fill will be placed within a significant vernal pool depression. The applicant proposes to fill 0.49 acres of significant vernal pool habitat for the proposed Monmouth substation expansion. The applicant proposes to provide compensation for impacts to significant vernal pool habitats and potentially significant vernal pool habitats. The compensation plan is described in Finding 18. The Department finds that the proposed project will not unreasonably harm any significant vernal pool habitat provided that the applicant compensate for impacts to significant vernal pool habitats and potentially significant vernal pool habitats as described in Finding 18.

Fifty-four Deer Wintering Areas (DWA) will be impacted by the proposed project with the removal of capable vegetation with the mapped deer wintering areas. DWAs are found on Segments 1, 3, 4, 6, 9, 10, 14, 15, 15 Alt., 17, 18, 24, 29, 30A, 34C, 35, 38B, 39 and 40A. All fifty four DWAs are classified by MDIFW as indeterminate in value. MDIFW requested that the applicant provide compensation for the loss of indeterminate value DWAs. Because none of the DWAs to be impacted by the proposed project are defined as moderate or high value by MDIFW, none are regulated under NRPA as significant wildlife habitat or under Chapter 375 §15 of the Site Law and the Department cannot require specific compensation for proposed impacts to these DWAs.

The applicant recognizes that healthy deer populations are important to Maine's economy and it has noted the occurrence of DWA's on the proposed compensation parcels, further described in Finding 18. The Department finds that in order to minimize impacts to DWAs, the applicant must construct and maintain the project in accordance with the Amended VMP. The Department further finds that the proposed project will not unreasonably harm any DWAs that are regulated under the NRPA or the Site Law and that impacts to unregulated DWAs can be minimized by constructing and maintaining the project in accordance with the Amended VMP.

Forty-nine Inland Wading Bird and Waterfowl Habitats (IWWH) will be impacted by the proposed project by the removal of capable species vegetation. Of those, nine IWWH habitats are ranked as high value. IWWHs are found on Segments 1, 3, 4, 6, 9, 10, 14, 15, 15 Alt., 16, 19, 24, 27, 34A, 34B, 35, 35B, and 40A. The applicant proposes to provide compensation for impacts to IWWHs. The proposed compensation plan is further described in Finding 18. MDIFW stated that the proposed compensation plan must be implemented and to further minimize impacts to IWWHs, the applicant must construct and maintain the project in accordance with the Amended VMP. The Department finds that the proposed project will not unreasonably harm any IWWH provided that the applicant implement the compensation plan described in Finding 18 and

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that the applicant constructs and maintains the project in accordance with the Amended VMP.

MDIFW also indicated that the following state listed and species of special concern species occur on or in the vicinity of the proposed transmission line project:

Blandings's Turtle (*Emys blandingii*)	State listed endangered species
Grasshopper Sparrow (*Ammodramus savannarum*)	State listed endangered species
Least Bittern (*Ixobrychus exilis*)	State listed endangered species
New England Cottontail (*Sylvilagus transitionalis*)	State listed endangered species and Federal candidate species
Northern Black Racer snake (*Coluber c. constrictor*)	State listed threatened species
Eastern Ribbon snake (*Thamnophis sauritus*)	State species of special concern
Spotted Turtle (*Clemmys guttata*)	State listed threatened species
Upland Sandpiper (*Bartramia longicauda*)	State listed threatened species
Wood Turtle (*Glyptemys insculpta*)	State species of special concern
Brook Floater (*Alasmidonta varicose*)	State listed threatened species
Tidewater Mucket (*Leptodea ochracea*)	State listed threatened species
Yellow Lampmussel (*Lampsilis cariosa*)	State listed threatened species
Creeper (*Strophitus undulates*)	State species of special concern
Common Moorhen (*Gallinula chloropus*)	State listed threatened species
American Coot (*Fulica Americana*)	State species of special concern
Bald Eagle (*Haliaeetus leucocephalus*)	State species of special concern
Barrens Chaetaglaea (*Chaetaglaea tremula*)	State species of special concern
Broad Sallow (*Xylotype capax*)	State species of special concern
Great Blue Heron (rookery)	State species of special concern

The proposed project will cross several waters used by Bald Eagles, a state species of special concern. MDIFW recommended that the applicant install aviation marker balls, or compatible utility standards deployed as line collision deterrents on shield wires at the following crossings:

ROW segment	Township(s)	Waterbody
01	Orrington	Fields Pond outlet
01	Orrington, Winterport	Penobscot River
01	Frankfort, Winterport	Marsh Stream
03	Detroit, Plymouth	Carlton Bog inlet
03	Detroit	East Br. Sebasticook River
03	Frankfort, Winterport	Marsh Stream
03	Pittsfield	Sebasticook River
06	Searsmont	Bartlett Stream
06	Somerville	Sheepscott River
09	Benton	Sebasticook River

10A	Winslow	Sebasticook River
14	Leeds	Dead River
15	Chelsea, Farmingdale	Kennebec River
15	Gardiner, Litchfield	Cobbosseecontee Stream
15	Greene	Hooper Brook
15A	West Gardiner	Cobbosseecontee Stream
16	Bowdoinham, Woolwich	Kennebec River
16	Kennebunk	Mousam River
17	Auburn, Lewiston	Androscoggin River
24	Biddeford, Saco	Saco River
34A	Benton, Fairfield	Kennebec River
34A	Oakland	Messalonskee Stream
34A	Waterville	Messalonskee Stream
35	Jefferson, Windsor	Sheepscott River
35	Warren	Saint George River
35B	Augusta	Lower Togus Pond
39	Dixfield, Peru	Androscoggin River
40A	Bucksport, Prospect	Penobscot River

MDIFW also recommended that there be no over story removal at four specific nest sites or foraging perches located in close proximity to the existing transmission line right of way. The locations are:

ROW segment	Township(s)	BAEA Nest #	Habitat Concern
01	Orrington	319B	diurnal perches
01	Winterport	325B	diurnal perches
16	Bowdoinham	009E, 009F	core nest buffer + diurnal perches
34A	Benton	278A, 278B	core nest buffer + diurnal perches

MDIFW stated that there are two or three specific trees at both the crossing in Orrington and the crossing in Winterport that are regularly used by perching bald eagles during all seasons. In order to save these trees, MDIFW is willing to mark these trees. MDIFW stated that if the trees can not be saved, the applicant should consider installing deterrents on the pole/towers or adding extra transmission line markers near these poles/towers to minimize the potential that eagles will use the poles/towers as perches. MDIFW commented that there have been documented injuries and deaths at some Maine localities where bald eagles have used the transmission line poles/towers as perches. The frequency and regularity of the use of these favorite perches in Orrington and Winterport near the transmission lines amplifies the risk of injury or death to those bald eagles. MDIFW stated that the U.S. Fish and Wildlife Service are charged with evaluating potential takings (death) under the Bald Eagle – Golden Eagle Protection Act. The U.S. Fish and Wildlife Service are currently evaluating the federal U. S. Army Corps of Engineers application.

MDIFW further stated that between March 1 and August 31, proposed construction activities located within ¼ mile of active nests could disturb breeding activities. MDIFW recommends that the applicant resurvey for nesting bald eagles to evaluate potential changes in nest locations and/or the status of active breeding when planning project construction between March 1 and August 31 in the following locations:

ROW segment	Township(s)	BAEA Nest # (~ROW distance)	Survey Site
01	Orrington	319A (1.4 km)	Brewer Lake
01	Orrington	319B (0.5 km)	Fields Pond
01	Winterport	325A (1.4 km)	Penobscot River
01	Winterport	614A (1.6 km)	Marsh Stream
02	Bucksport	500A (0.7 km)	Penobscot River
03	Frankfort	614A (1.3 km)	Marsh Stream
09	Palmyra	513A (1.6 km)	Douglas Pond
10A	Winslow	251A (0.4 km)	Pattee Pond Brook
10A	Winslow	251D (0.5 km)	Pattee Pond Brook
10A	Winslow	555A (0.7 km)	Kennebec River
14	Livermore	356A (1.0 km)	Androscoggin River
15	Auburn	408B (0.3 km)	Androscoggin River
15	Greene	407B (0.7 km)	Sabattus Pond
15	Greene	407C (0.4 km)	Sabattus Pond
15	Livermore Falls	537A (0.4 km)	Androscoggin River
15A	West Gardiner	003C (1.2 km)	Cobbosseecontee L.
16	Bowdoinham	009E (0.2 km)	Kennebec River
16	Bowdoinham	009F (0.2 km)	Kennebec River
17	Durham	562B (0.5 km)	Androscoggin River
17	Lewiston	562A (0.0 km)	Androscoggin River
29	Wiscasset	563A (1.3 km)	Back River
29	Wiscasset	431A (0.4 km)	Sheepscott River
34A	Benton	278A (0.1 km)	Kennebec River
34A	Benton	278B (0.1 km)	Kennebec River
34A	Benton	278C (1.0 km)	Kennebec River
35	Waldoboro	403A (0.7 km)	Medomak Pond
39	Mexico	586A (1.1 km)	Androscoggin River

The applicant has reviewed MDIFW's comments and stated that there is no tree clearing proposed in Segments 16 and 34A in the areas around the nest sites. The applicant also stated that the crossings in Orrington and Winterport are located greater than one-quarter of a mile away from nest sites and that it will most likely have to remove the perch trees at those crossings. The applicant has agreed to work with MDIFW to minimize impacts to bald eagles in the area and will construct deterrents on the transmission lines, poles and towers at these locations. The applicant has also agreed to resurvey for nesting bald eagles if project construction is scheduled to occur in the areas listed above between March 1 and August 31. The Department finds that the proposed project will not unreasonably harm any bald eagle habitat provided that the applicant install aviation marker balls or compatible utility standards deployed as line collision deterrents on shield wires at the transmission line crossings listed above.

MDIFW drafted a document entitled "Maine Power Reliability Program: Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" last revised November 24, 2009. This document outlines MDIFW's recommended protection standards during right-of-way clearance and maintenance activities when those activities are in close proximity to a documented occurrence or occupied habitat of a state-listed species. MDIFW stated that if the applicant follows these recommended standards then there will not be a need for

additional mitigation as part of an Incidental Take Plan (ITP). The applicant has received the above referenced document and is working with MDIFW to refine the recommended protection standards. The applicant will construct the project in accordance with the amended protection standards. The applicant anticipates that it will not be able to meet MDIFW's protection standards for black racer snakes in the area of the proposed Maguire Road substation expansion. The applicant is working with MDIFW to file an ITP for black racer snakes.

Therefore, the Department finds that the proposed project will not unreasonably harm any rare, threatened or endangered species habitat provided that the applicant constructs and maintains the project in accordance with MDIFW's final version of the document entitled "Maine Power Reliability Program: Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" last revised November 24, 2009, or the latest revised version, and that the applicant submit a copy of the MDIFW approved ITP prior to starting construction at the Maguire Road substation.

The applicant proposes to fill 1,200 linear feet of stream channel in association with the expansion of the existing Surowiec substation in Pownal. The applicant also proposes to construct 1,700 linear feet of new stream channel for Runaround Brook. Due to existing topography, the fact that the existing channel is only 10 feet from the substation yard and with a little help from beavers, Runaround Brook frequently floods the Surowiec Substation and causes a threat to public safety. Relocating Runaround Brook will help alleviate the threat to public safety. On September 8, 2009 a fishery biologist from MDIFW walked the site with Department staff and the applicant to discuss options for creating a functioning stream channel elsewhere on the site. The applicant's proposed stream relocation/restoration plan is further described in Finding 18. The Department finds that the proposed project will not unreasonably harm any aquatic or adjacent upland habitat, freshwater, estuarine or marine fisheries or other aquatic life provided that prior to expanding the Surowiec substation, the applicant relocate Runaround Brook as described in Finding 18.

8. HISTORIC SITES:

In consultation with the Maine Historic Preservation Commission (MHPC), the applicant conducted Cultural Resource Surveys on the MPRP project area to identify significant historic sites within the Area of Potential Effect (APE) along the proposed transmission line corridors and the new or expanded substations. For this project, the APE is generally defined as all landforms within the transmission line corridors, which includes both cleared areas where transmission lines are existing and contiguous uncleared areas that may be used for future development.

Pre-historic archaeology: The applicant completed archaeology surveys in a majority of the 26 segments of the proposed upgrade. MHPC recommended further action in the form of Phase II surveys at specific sites in segments 3, 9, 10, 15, 16, 17, 35 (portion), and 40A. Of the segments that had Phase I and Phase II surveys conducted on them, MHPC recommended that the applicant conduct Phase III surveys at specific sites in

segments 6, 10A, 27, and 35 (portion) if the applicant could not design the project to avoid these sites.

For the substation sites, MHPC reviewed and accepted the applicant's Phase I surveys for all with the exception of the Maguire Road substation, the Maine Yankee substation, Raven Farm substation, Spring Street substation, and Surowiec substation which were still undergoing field work.

Historic archaeology: Of the 26 segments, five were determined by the applicant to have no potential impact on historic sites. Additional Phase II survey work was done on the remainder of the segments.

Two substation sites were found to contain potential historic archaeological sites: Albion Road and Surowiec. The applicant conducted Phase II surveys on these sites.

Historic architecture: The applicant completed historic architecture surveys on all of the segments.

All of the substation sites were surveyed by the applicant for historic architecture.

The applicant submitted a copy of a Memorandum of Agreement (MOA) among the U.S. Army Corps of Engineers, MHPC and the Advisory Council on Historic Preservation regarding the proposed project. The MOA is dated February 8, 2010 and was signed by the parties on March 15, 2010 and March 19, 2010. MHPC reviewed the proposed project and stated that provided that the applicant complies with the terms and conditions outlined in the MOA, the project as proposed will not have a detrimental effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

Based on the surveys conducted by the applicant, the MOA, and the comments of MHPC, the Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites either on or near the development site provided the applicant complies with the terms and conditions outlined in the MOA referenced above.

9. UNUSUAL NATURAL AREAS

The Department reviewed the applicant's proposed project by assessing whether any of the property which would be affected is currently documented to contain any endangered or threatened plant species. With the exception of the small whorled pogonia (*Isotria medeoloides*) the Maine Natural Areas Program (MNAP) database does not contain any records documenting the existence of endangered or threatened plant species on the project site. In coordination with MNAP staff, the applicant conducted botanical surveys of the proposed project site and identified additional rare, threatened or endangered (RTE) plants and plant communities within the development area. Each RTE plant found is listed in Table 9-1 (revised January 8, 2010) of the application. The most common RTE plants encountered were Small reed-grass (*Calamagrostis cinnoides*) and Pale green orchis (*Platanthera flava*) both plants are listed as a species of special concern, Northern

blazing star (*Liatris scariosa*) and Pendulous bulrush (*Scirpus pendulus*) both plant species are listed as threatened. The applicant also found 3 locations of swamp saxifrage (*Saxifraga pensylvanica*), a plant species of special concern, on Segment 15 Alt. while doing field surveys in 2009.

Based on a review of the MNAP database and on site botanical surveys, no state- or federally-listed threatened or endangered plants or unusual natural communities are known to occur in the vicinity of the substation sites with the exception of the Maguire Road substation site. This substation is located near the Kennebunk Plains, an open sand plain grassland area that contains several listed rare plant species.

To avoid impacts to RTE plant species, the applicant's plans utilize erosion and sedimentation controls, equipment mats, and dormant-season construction timing. The applicant identified RTE species encountered within specific segments and outlined measures to minimize and avoid potential impacts from the project's construction.

In comments dated September 14, 2009, MNAP stated that it was satisfied with the proposed approach for avoiding and minimizing disturbances to rare plant populations, and further noted that it is not requiring special measures to avoid two of the identified species, Columbia water-meal and Small reed-grass, since the proposed impacts would be minimal and will not adversely affect those populations. MNAP updated its comments on January 28, 2010 to address impacts to the swamp saxifrage on Segment 15 Alt. The applicant proposes to avoid directly impacting swamp saxifrage by moving access roads to the other side of the right of way. When clearing is necessary, it will be done by hand. Prior to the start of construction on Segment 15 Alt., the applicant proposes to clearly identify the location of swamp saxifrage in the field so that appropriate measures can be taken by construction crews. MNAP is satisfied with the applicant's approach for avoiding and minimizing disturbance to swamp saxifrage.

MNAP commented that another area of concern is the proposed expansion of the Maguire Road substation in Kennebunk. This substation is adjacent to MDIFW's Kennebunk Plains Wildlife Management Area. The general area contains numerous documented rare species, both plant and animal, as well as some of the rarest occurrences of natural communities tracked by MNAP, including a nearby pitch-pine heath barren, which is ranked S1 (critically imperiled in Maine because of extreme rarity) by the MNAP. MNAP noted that the applicant proposes to preserve a 54-acre parcel known as the Day Brook property to off-set potential adverse impacts to a forested wetland located in the expansion area for the substation. Since several listed rare plant species occur in the vicinity of the proposed Maguire Road substation expansion site and those plants will be impacted by the proposed project, MNAP recommended that the adjacent Day Brook property be conveyed in fee to MDIFW for permanent ownership with a management endowment provided by the applicant to ensure that the property is appropriately restored and managed to enhance functioning ecological systems, and that construction disturbances to the Maguire Road substation site and periphery are appropriately restored upon completion of the substation expansion. The applicant intends to convey the property to MDIFW as described in Finding 18.

Provided the above-described measures to avoid and minimize impacts are implemented, the MNAP recommendations are followed by the applicant, and the Day Brook property is conveyed to MDIFW as described in Finding 18, the Department finds that the proposed development will not have an adverse effect on the preservation of any unusual natural areas either on or near the development site.

10. BUFFER STRIPS:

In its analysis of whether an applicant has made adequate provision for fitting a proposed project harmoniously into the existing natural environment, as required under the Site law, the Department considers whether natural buffer strips are necessary to protect wildlife and water quality and as visual screens to protect existing uses. Chapter 375(9) of the Department's Rules outlines certain factors the Department may consider in making these determinations and provides that the Department may, as a term or condition of approval, establish any reasonable requirement to ensure that a developer has made adequate provision for the establishment of buffer strips.

The applicant submitted a "Roadside Visual Buffer Report," prepared by Terrence J. DeWan & Associates, and dated May 14, 2009 as Exhibit 6-2. This report includes Table 6-1 which summarizes the recommended roadside buffers at various roadside crossings along the transmission corridors and a plant list of appropriate species for these buffers. The report recommends that buffers be planted at fifty three different roadside locations, in some cases on both sides of the road, in order to minimize the effects of the widening of the utility corridor and the potential effects of new structures placed in the corridor. The applicant stated that they will follow the recommendations of this report.

The applicant also submitted a document entitled, "Vegetation Management Practices for the Maine Power Reliability Project Transmission Line Corridor" dated August 2009 (VMP). The objectives of the VMP are to conserve sensitive natural resources including streams, wetlands, significant wildlife habitats, and rare and exemplary natural communities located within electric transmission line corridors. It applies to both initial construction and ongoing maintenance activities in the transmission line corridor. The document includes guidelines regarding general vegetation management practices in protected natural resources, the spill and release of petroleum products, herbicide applications, arboricultural management practices (removal of capable species), and invasive plant monitoring. The document also recommends maintaining 25 foot wide riparian buffers along streams unless the applicant demonstrates that the functions and values of the riparian buffer will not be impacted by the removal of vegetation. It further provides for minimizing impacts to wetlands, significant vernal pools, inland wading bird and waterfowl habitats, deer wintering areas, rare and exemplary natural communities and ecosystems by clearing during frozen conditions when practicable and keeping construction equipment on designated pre-established cutting lanes, utilizing hand cutting or reach-in techniques to minimize the amount of slash left in the resources. The applicant states that the practices outlined in this document balance the operational needs of the MPRP project and benefits the environment.

MDIFW reviewed the VMP document submitted by the applicant and determined that it does not provide enough protection for sensitive resources during project construction and maintenance operations. Based on its own staff review of the applicant's plans and MDIFW's comments, the Department concurs with MDIFW. The Department finds that as proposed the applicant's project would not adequately protect wildlife habitats, fishery and aquatic habitats, water quality and freshwater wetland habitats. However, with the following changes to the applicant's construction and vegetation maintenance proposals, which are also set forth in the document attached to this Order as Appendix B, entitled, "Vegetation Management Practices: Maine Power Reliability Program, last revised March 31, 2010" (Amended VMP) the project can be constructed in a manner which will not result in unreasonable impacts to wildlife habitats, fishery and aquatic habitats, water quality and freshwater wetland habitats. The Amended VMP includes standards for general vegetation management practices in protected natural resources, the spill and release of petroleum products, herbicide applications, arboricultural management practices (removal of capable species), and invasive plant monitoring. It differs from the applicant's proposal in several ways including but not limited to:

A) Buffers are increased to 100 feet for all Class A and Class AA waters (listed in Appendix B of this Order), outstanding river segments and rivers, streams or brooks containing threatened or endangered species, unless the Department determines that the functions and values of the riparian buffer will not be impacted by the removal of vegetation and approves an alternative buffer;

B) Equipment operation within significant vernal pool depressions is prohibited;

C) Clearing techniques are established to be used within significant vernal pool habitats and inland wading bird and waterfowl habitats; and

D) All stream buffers, wetlands, significant vernal pool habitats, inland wading bird and waterfowl habitats, deer wintering areas, rare and exemplary natural communities and ecosystems are required to be flagged in the field prior to initial clearing, and flagged or located with GPS prior to any maintenance operations.

The project must be conducted according to the Amended VMP both during initial project construction and for ongoing vegetation maintenance operations.

The Amended VMP provides the minimum amount of protection necessary to prevent harm to wildlife and fishery habitats in rivers, streams and brooks, significant vernal pool habitats, inland wading bird and waterfowl habitats, and rare and exemplary natural communities and ecosystems. If buffers are maintained as outlined in this Amended VMP the Department finds that the applicant's project will adequately avoid and minimize the impacts of the project to the protected natural resources. To ensure that the proposed project is not overrun with invasive species as a result of the construction project, the Department further finds that the applicant must develop an invasive species vegetation monitoring plan for the project and submit it to the Department for review and approval prior to the start of construction on the project. The vegetation monitoring plan must have the objective of preventing the introduction and spread of invasive species as a result of construction and must include adequate measures reasonably expected to accomplish the objective.

The Maine Forest Service reviewed the project and submitted recommendations to minimize the risks of importing invasive pests as a result of the use of timber mats and

matting. The applicant agreed to construct the project in accordance with the Forest Service's recommendations. Those recommendations have been added as Section 1E to the Amended VMP, copy attached to this Order.

Vegetated stormwater buffers are required to meet the Stormwater general standards at three substations. The proposed stormwater buffers are further described in Finding 12.

The Department finds that the applicant has made adequate provision for buffer strips provided that the applicant construct and maintain the project in accordance with the Amended VMP, copy attached as Appendix B and the applicant must develop an invasive species vegetation monitoring plan for the project and submit it to the Department for review and approval prior to the start of construction on the project.

11. SOILS:

The applicant submitted soil survey maps and Class D Medium-Intensity Soil Surveys for the existing substations proposed to be expanded and soil survey maps and Class B-High-Intensity Soil Survey for the proposed new substations. Geotechnical investigations were prepared for both substation expansions and proposed substations.

The soil reports were prepared by a certified soils scientist and the geotechnical investigations were prepared by a registered professional engineer and reviewed by staff from the Division of Environmental Assessment (DEA) of the BLWQ. DEA also reviewed a Blasting Plan submitted by the applicant and outlining the proposed procedures for removing bedrock.

DEA commented on the applicant's blasting plan and requested revisions associated with the proposed ground vibration, air overpressure and flyrock standards in a review memoranda dated October 3, 2009 and revised October 6, 2009. In a letter dated December 1, 2009, the applicant revised its Blasting Plan in its response to DEA's comments. The applicant agreed to follow the requirements regarding control of ground vibration, air overpressure, and flyrock control described DEA's memorandum. As reflected in DEA comments matting may not be necessary for flyrock control on some shots, due to the distance from resources that are likely to be impacted. In the event that flyrock should land in a protected natural resource, it must be removed. However, the department recognizes that there may be conditions under which removal of the material from a resource would only increase the impact to the resource; if the applicant believes this to be the case, the applicant must contact the Department for approval. Records of any failure to meet the flyrock performance standards should be kept and used to determine whether or not additional precautions are needed in subsequent blast design. All failures to meet blasting performance standards should be identified to the Department by the third-party inspector (further discussed in Finding 12). The revised Blasting Plan, dated December 1, 2009, complies with the Department's standards for blasting.

If a rock crusher is being utilized on site, the applicant must insure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license.

The Department finds that, based on the soil maps and surveys, the geotechnical investigations, the revised Blasting Plan, and DEA's review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices.

12. STORMWATER MANAGEMENT:

The project primarily involves the expansion and upgrade of 354 miles of existing overhead transmission lines and eight substations. It also involves the construction of 6.4 miles of new transmission line corridor and five new substations. The cumulative impervious areas that will be created as a result of substation improvements will total approximately 65.6 acres. The cumulative developed area will total approximately 79.8 acres. In accordance with the Department's Stormwater Management Rules, Chapter 500, a project is required to meet appropriate standards to prevent and control the release of pollutants to waterbodies, wetlands, and groundwater, and to reduce impacts associated with increases and changes in flow.

Transmission Lines:

Within the length of the expanded and upgraded transmission line corridor, the permanent conversion of vegetated areas to impervious surfaces will be limited to the installation of the transmission line poles themselves. Approximately 6.9 acres will be disturbed for pole installation. Temporary long term access roads within the corridor will disturb approximately 64.8 acres. Additionally, over the length of the corridor, approximately 1,652 acres will be altered by the removal of capable tree species (trees capable of attaining heights that would cause safety or reliability problems). The clearing of new transmission line corridor and the expansion of existing corridors will include the removal of mature trees and capable species as necessary, to allow placement of pole structures and to ensure adequate clearance between any vegetation and the electric conductors. All other vegetation will remain, and new low-growing vegetation will be allowed to grow.

There will be no permanent access roads constructed for the transmission lines. The vast majority of the temporary access roads will be in place less than 18 months and where they are in protected natural resources will be constructed on protective matting.

The project includes some long-term temporary access roads that will be in place longer than 18 months. These roads will typically be constructed of gravel or crushed stone underlain by geotextile fabric. All of the temporary access roads are shown on the resource maps submitted with the application. However, the applicant has not indicated which of the temporary access roads will be long-term. This determination will be made by the contractor based on specific site conditions and timing and sequencing of the

various segments and sections of the transmission line upgrades. The applicant estimated that the total area of the long-term temporary access roads will not exceed 9.5 acres.

In all cases, the temporary access roads will be restored to original grade upon completion of the project, and in most cases, sooner. All areas disturbed by access road construction and use will be stabilized including the road ditches, travel way, and slopes, and restored back to a vegetated condition. The applicant states that, in all cases, after a transmission segment is energized, the temporary access road to that segment will be removed, the area will be graded to the original conditions, and vegetation will be fully established such that none of the roads would be considered "developed area" or "impervious area" requiring additional stormwater treatment measures.

Because the vast majority of the transmission line corridor improvements will be limited to vegetation management only, the Department determined that a stormwater analysis was not required for these areas. Once the corridor work is complete, the affected area with the exception of the area occupied by poles will be allowed to re-vegetate and will be maintained in an early successional state. The corridor will become dominated by a variety of shrubs and herbaceous species, where it is reasonable to anticipate that the post-development stormwater runoff will be similar in quantity and quality to the pre-development runoff. Where the transmission corridor crosses existing wetland areas, the applicant must ensure that topsoil removed to install pole structures be returned to the disturbed area to encourage re-growth of wetland vegetation.

The Department's Division of Watershed Management (DWM) reviewed the proposed erosion and sedimentation control plan (ESC Plan) for the construction, expansion, and upgrades to the transmission line corridor. DWM commented that the restoration standards contained in the ESC Plan should include provisions for removal, stockpiling, and replacement of topsoil on disturbed areas to promote rapid re-vegetation in upland and wetland areas. The applicant agreed to supplement its ESC Plan to state: "Wherever practicable, to facilitate the regeneration of natural vegetation within and adjacent to protected natural resources, during the construction of substations, pull sites, and roads that cause soil disturbance, topsoil will be separated from the mineral soil when excavating and stockpiled outside areas of concentrated flow and areas prone to flooding, and handled in accordance with Section 3.3 Construction in Wetlands of CMP's Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects. The excavated topsoil will be replaced in close proximity to its origin and to a depth sufficient to support vegetative growth."

DWM further commented that the ESC Plan should be revised to require restoration of all disturbed areas not developed as part of the proposed project, including disturbance as a result of pole installation, temporary access roads, permanent access roads, substation construction, and resource crossings. The applicant agreed to revise Section 9.2 of its Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects to state: "Upon completion of the project, all disturbed areas will be permanently revegetated or otherwise permanently stabilized. This includes the restoration of all areas disturbed by pole installation efforts, temporary access roadways, permanent access roadways, substation construction efforts, and resource

crossings. Restoration is generally assumed to be a well-established vegetative cover. All cut and fill slopes must be revegetated, stabilized with riprap, or stabilized with erosion control mix, as appropriate to the slope conditions."

Additionally, DWM commented that the definition of "temporary access road" should be revised to require the stabilization of all areas disturbed by the road's construction and use, including road ditches, travel way, and slopes. In most cases, ditches should be filled in to re-establish the pre-development drainage conditions. The applicant agreed to revise its definition of a temporary access road to read: "A road constructed solely for the project access which is restored to original grade upon project completion, if not sooner. All areas disturbed by the access road's construction and use will be stabilized including the road's ditches, travel way, and slopes back to vegetated conditions. In most cases, any roadway ditches associated with the temporary access road should be refilled to re-establish the pre-development drainage conditions."

Finally, DWM commented that the applicant's on-site environmental specialist should designate, during construction, where water bars or other erosion controls will be located and oriented. The Department's third-party inspector (the requirement for which is discussed below) will be responsible for inspecting the construction sites for compliance with the ESC Plan, among other things. The applicant's environmental personnel must devise solutions and direct the efforts of the contractors toward eliminating identified problems. The applicant agreed to amend Section 9.2 of its Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects to read: "Previously installed water bars may remain or new ones will be installed at locations designated by CMP or their designated representative. To prevent accelerated soil erosion, such water bars will be installed on all access and construction roads to be closed to vehicle traffic and on steep sections of permanent roads. Permanent water bars will be constructed to a sufficient height and width to divert the amount of water anticipated at each location as well as to provide some post-project permanence to the site. Water bars on long-term temporary access roads will be constructed in such a manner that they will remain effective and require minimal maintenance, and will be permanently seeded to ensure their long-term stability."

Substations:

The cumulative impervious areas (areas covered with a low-permeability material such as asphalt or concrete or compacted gravel roads and parking lots) that will be created as a result of substation improvements will total approximately 65.6 acres. The cumulative developed area (land that has been disturbed but is not returned to a condition with the same drainage pattern within one year of the initial disturbance) will total approximately 79.8 acres.

Stormwater management information was submitted for all of the new and upgraded substations included in the project. The Orrington substation will be upgraded but not expanded; the Belfast, Highland, Livermore Falls, Maguire Road, Maine Yankee, Spring Street, and Surowiec substations are existing and will be expanded; and the Albion Road, Coopers Mills Road, Larabee Road, Monmouth, and Raven Farm substations will be new

substations. An engineer from the DWM reviewed each proposed substation design for conformance with Chapter 500 standards.

The applicant submitted an Erosion and Sedimentation Control Plan for the construction proposed for the substation expansions and new substations that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of the DWM.

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor. Prior the start of construction, the applicant must conduct a pre-construction meeting to discuss the construction schedule and the erosion and sediment control plan with the appropriate parties. This meeting must be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector.

Given the size and nature of the project site, the applicant must retain the services of third party inspectors in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order. The applicant must retain a minimum of four third-party inspectors to monitor erosion control and the protection of natural resources on the project site during construction. Each inspector will be responsible for no more than 100 linear miles of transmission line corridor and no more than four substation projects. Prior to the start of each transmission line segment and prior to the start of each substation construction or expansion, the applicant must arrange to meet with the appropriate third-party inspector to discuss the construction sequence for each segment or substation and strategies for minimizing potential impacts to protected natural resources. The applicant must develop its construction plan with input from the appropriate third-party inspector.

The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of DWM. The maintenance plan is based on the standards contained in Appendix B of Chapter 500 and the Department finds that the revised plan adequately provides for inspection and maintenance of stormwater controls as outlined in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Department's Solid Waste Management Rules.

Based on revised plans, the Department finds that the proposed project will comply with the performance standards for maintenance known as Housekeeping outlined in Appendix C of Chapter 500.

Based on DWM's review of the erosion and sedimentation control plan and the maintenance plan, revised as described above, the Department finds that the proposed project meets the Basic Standards contained in Stormwater Management Rules, Chapter 500(4)(A).

The applicant intends to construct the substation yards using a sub base of clean gravel and a surface layer of crushed stone to promote rapid infiltration of runoff into the ground. This type of construction will generally result in the attenuation of peak runoff flow rates to ensure that the flooding standard is met in each case.

A general description and the proposed treatment measures for each substation, and DWM's comments relative to each substation, are outlined below:

a. Albion Road substation, Benton: This new substation will be composed of a crushed stone yard, an access road from Albion Road, a control house and a small access drive to the transmission line corridor. The substation includes approximately 1.00 acre of impervious area and approximately 11.71 acres of developed area. It is located within the Fowler Brook and the Sebasticook River watersheds. Stormwater runoff will be treated with vegetated swales, level spreaders, and forested and meadow buffers. DWM found that the proposed substation's stormwater management system is designed to meet the General Standards but recommended that the applicant retain the services of a professional engineer to oversee the construction and stabilization of the vegetated swales and level spreaders and provided that the third-party inspector oversees the construction and stabilization of the substation.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation development. The decreases in peak runoff are almost entirely due to the replacement of fairly wet woodland soils with gravel fill and crushed stone above the natural ground surface, resulting in marginally better infiltration of precipitation into the yard. DWM concurs with this analysis.

b. Belfast substation, Belfast: The expanded substation includes approximately 0.32 acre of new impervious area and 0.32 acre of new developed area. It is located within the watershed associated with Westcot Stream and a tidal portion of the Passagassawakeag River. DWM found that the proposed substation expansion area's stormwater management system is designed to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will remain unchanged as a result of substation development. DWM concurs with this analysis.

c. Coopers Mills Road substation, Windsor: This new substation and associated access road includes approximately 19.22 acres of impervious area and approximately 20.96 acres of developed area, which includes the access road, a control house and

the crushed stone substation yard. It lies within the watershed of the West Branch of the Sheepscot River. Stormwater runoff from developed areas will be treated with vegetated swales, level spreaders, and meadow buffers. DWM concluded that the proposed substation's stormwater management system is designed to meet the General Standards but recommended that the applicant retain the services of a professional engineer to oversee the construction and stabilization of the vegetated swales and level spreaders and provided that the third-party inspector oversees the construction and stabilization of the substation.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation development. DWM concurs with this analysis.

d. Highland substation, Warren: The expansion of this existing substation includes approximately 0.21 acre of new impervious area and 0.21 acre of new developed area. It lies within the Oyster River watershed. DWM found that the proposed substation expansion area's stormwater management system is designed to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease slightly as a result of substation expansion. DWM concurs with this analysis.

e. Larrabee Road substation, Lewiston: The new substation, a control house and associated access road will result in approximately 16.09 acres of new impervious area and 17.11 acres of new developed area on a parcel that contains existing disturbed areas associated with earth mining activities and a number of structures. The site is located in the Androscoggin River watershed. Stormwater treatment will be accomplished with vegetated and stone-lined swales, level spreaders and forested and meadow buffers, and the substation yard itself. DWM found that the proposed substation's stormwater management system is designed to meet the General Standards but recommended that the applicant retain the services of a professional engineer to oversee the construction and stabilization of the vegetated and stone lined swales and level spreaders and that the third-party inspector oversees the construction and stabilization of the substation .

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation expansion. DWM concurs with this analysis.

f. Livermore Falls substation, Livermore Falls: The expansion of the existing substation will result in approximately 1.59 acres of new impervious area and new developed area. Runoff from the substation flows into Clay Brook and eventually the Androscoggin River. Stormwater runoff will be treated in vegetated swales. DWM found that the proposed stormwater management system for the expanded substation

is designed to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease slightly as a result of substation expansion. DWM concurs with this analysis.

g. Maguire Road substation, Kennebunk: The expansion of the existing substation will create approximately 3.60 acres of new impervious and developed area (crushed stone yard and structures and gravel roadways). The substation is located within the watershed of Day Brook. Stormwater runoff will be treated in the existing infiltration systems, vegetated swales and level spreaders. DWM stated that the existing stormwater management system for the expanded substation is designed to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease slightly as a result of substation expansion, with the exception of a slight increase along the site's eastern edge. DWM concurs with this analysis and recommends that the slight increase in peak flows at the one analysis point be considered insignificant, since the increases in the 2-year and 10-year storm are in fractions of a cubic foot per second, the increased discharges are spread over 700 feet of dense woodland, and the total runoff volume is decreasing slightly for each storm event.

h. Maine Yankee substation, Wiscasset: The expansion of the existing substation will create approximately 0.52 acres of new impervious and developed area. The substation lies within the Sheepscot Bay watershed. The applicant proposes to modify existing conveyance swales to accommodate the new developed area, and to construct the expanded substation yard to promote rapid infiltration of runoff. DWM found that the proposed stormwater management system for the expanded substation is designed to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease slightly as a result of substation expansion. DWM concurred with this analysis.

i. Monmouth substation, Monmouth: The new substation and associated access roads will create approximately 1.13 acres of impervious area and 1.23 acres of developed area. The site currently contains a small substation that will be removed, and is located within the watershed of Cobbosseecontee Lake, a lake most at risk from development pursuant to Chapter 502.

Because of the proposed project's location in the watershed of Cobbosseecontee Lake, stormwater runoff from the project site must be treated to meet the phosphorus standard outlined in Chapter 500(4)(C). The applicant's phosphorus control plan was

developed using methodology developed by the Department and outlined in "Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development". For this project, the Permitted Phosphorus Export is 0.1892 pounds of phosphorus per year. The applicant proposes to remove phosphorus from the project's stormwater runoff by utilizing vegetated swales and ditch turnouts, a vegetated underdrained soil filter, and by constructing the substation yard with a crushed stone surface and gravel sub base to promote rapid infiltration of runoff, as shown on the set of plans referenced in Finding 1. The predicted phosphorus export for the project site based on the applicant's model is 1.53 pounds of phosphorus per year. DWM commented that the stormwater management system for the expanded substation will reduce the export of phosphorus by 58%; however, the developed site will exceed the allowable export of phosphorus by 0.455 pounds per year. In order to compensate for the excess phosphorus export, the applicant submitted a payment of $11,377 to the Department's Lake Phosphorus Compensation Fund to be utilized at other sites in the Cobbosseecontee Pond watershed to reduce phosphorus exports to the pond. With the compensation fee, the Department finds that the expanded substation will be constructed to meet the General (Phosphorus) Standards but recommended that the applicant retain the services of a professional engineer to oversee the construction and stabilization of the vegetated swales and ditch turnouts and the vegetated underdrained soil filter and provided that the third-party inspector oversees the construction and stabilization of the substation.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation expansion. DWM concurs with this analysis.

j. Orrington substation, Orrington: The applicant proposes to construct internal upgrades to this existing substation. No new impervious or developed area will be created with these upgrades; therefore, this substation improvement is not required to meet Chapter 500 standards.

k. Raven Farm substation, Cumberland: The new substation includes approximately 16.34 acres of impervious area and 16.60 acres of developed area, including the substation yard a control house and associated access roads. The site drains to an unnamed tributary that ultimately flows into Broad Cove (Casco Bay). Stormwater treatment will be accomplished using vegetated swales, underdrained soil filters, and the crushed stone substation yard, which will promote rapid infiltration of runoff. DWM found that the stormwater management system for the new substation is designed to meet the General Standards but recommended that the applicant retain the services of a professional engineer to oversee the construction and stabilization of the vegetated swales and underdrained soil filters and provided that the third-party inspector oversees the construction and stabilization of the substation.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation expansion. DWM concurs with this analysis.

l. Spring Street substation, Westbrook: The expansion of this existing substation will result in approximately 1.37 acres of new impervious and developed area, including post-1975 development at the substation, and will include a new access road and an expanded substation yard. The site is located within the Long Creek Watershed. Long Creek is an Urban Impaired Stream as defined in the Stormwater Rules, Chapter 502. Runoff from the new access road will be treated by an adjacent meadow buffer. The post-1975 expansions were built, and the proposed expansion area will be built, to promote rapid infiltration of runoff. DWM found that the stormwater management system for the existing post-1975 development is built, and the proposed expansion of the substation will be constructed, to meet the General Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion.

To comply with Chapter 500(4)(D)(2), in lieu of mitigation for the impacts to an urban impaired stream watershed, the applicant submitted a payment of $1,800 to the Cumberland County Soil and Water Conservation District's Compensation Fee Utilization Program to be utilized at other sites in the watershed.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease slightly as a result of substation expansion. DWM concurs with this analysis.

m. Surowiec substation, Pownal: The expansion of the existing substation will result in approximately 3.95 acres of new impervious area and approximately 4.33 acres of new developed area, including the expanded yard and associated access ways. Runoff flows into Runaround Brook, which will be permanently relocated during construction of the substation expansion. Runaround Brook flows into Runaround Pond, which is considered a Lake Most at Risk from Development pursuant to Chapter 502. Therefore, stormwater runoff from this site must be treated for phosphorus removal. Runoff will be treated in a vegetated swale and the substation yard will be built with a crushed stone surface and gravel sub base to promote rapid infiltration of runoff. DWM commented that the expanded substation's stormwater management system is designed to meet the General (Phosphorus) Standards provided that the third-party inspector oversees the construction and stabilization of the substation expansion. The expanded substation's phosphorus export will be 2.184 pounds per year, which is less than the allowable export of 2.186 pounds per year.

The applicant submitted a stormwater modeling analysis that indicates that peak runoff rates from the site for the 2-year, 10-year, and 25-year storms will decrease as a result of substation expansion. DWM concurs with this analysis.

DWM found that, for the five substations that include the construction of stormwater management structures as part of the approved design, the applicant should be required to retain the services of its design engineer or other qualified consultant to inspect the siting and construction of the structures. Within 30 days of the completion of the structures, the applicant's engineer should contact the Department in writing to verify that the structures

were installed in the approved locations and stabilized in accordance with the approved plans. This documentation must be accompanied by photographs of each structure.

As summarized above, the applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area. Portions of the proposed project meet the definition of "a linear portion of a project" in Chapter 500, and in those portions the applicant is proposing to control runoff volume from no less than 75% of the impervious area and no less than 50% of the developed area.

Forested and meadow stormwater buffers will be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500. Prior to the start of construction on substations that include buffers in their stormwater management plans, the buffer locations must be permanently marked on the ground.

Based on the stormwater systems' designs and DWM's review of those designs, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500, General Standards and the phosphorus standard, where applicable.

Based on the payment of a compensation fee, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500, requirements for projects in the watershed of an Urban Impaired Stream Standard.

To demonstrate that each of the substations will meet the Chapter 500 Flooding Standard, the applicant submitted estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, of the U.S.D.A. Soil Conservation Service. As described above, the applicant demonstrated that each substation's stormwater management system will detain, retain, or result in infiltration of stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. In the majority of cases, the post-development peak flow from the site will not exceed the pre-development peak flow from each site. In one case, post-development peak flow from the site will be increased by an insignificant amount over the pre-development peak flow from the site. The peak flow of the receiving waters will not be increased as a result of stormwater runoff from the development site.

Based on the system's design and DWM's analysis, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Flooding Standard under Chapter 500, for peak flow from the project site, channel limits and runoff areas.

The Department further finds that the proposed project will meet the Chapter 500 standards for: (1) easements and covenants; (2) management of stormwater discharges; (3) discharge to freshwater or coastal wetlands; and (4) threatened or endangered species.

13. GROUNDWATER:

Under the Site Law, an applicant must demonstrate that the development would not adversely affect groundwater quality. The pertinent regulation promulgated under the Site Law, Chapter 375 §7, requires the applicant to demonstrate that the development will not have an unreasonable adverse effect on groundwater quality, including the storage and/or disposal of solid wastes, hazardous wastes, and leachable or liquid wastes, including petroleum products and septage because they pose serious threats to public health, safety and welfare through the potential pollution of the groundwater when such storage and or disposal occurs on or above sand and gravel aquifers or the recharge areas of sand and gravel aquifers.

Portions of the transmission line corridor are located over mapped sand and gravel aquifers. Because of the length of the transmission line corridor, the project will be located over both significant and non significant sand and gravel aquifers. The proposed expansion or new transmission line corridor does not propose any withdrawal from, or discharge to, the groundwater.

Both the Larrabee Road Substation and the Maguire Road Substation are located over mapped sand and gravel aquifers, which are not significant sand and gravel aquifers as confirmed by a DEA geologist. The proposed project does not propose any withdrawal from, or discharge to, groundwater.

The applicant currently has existing Spill Prevention, Countermeasures and Control (SPCC) plans for the existing substations that contain oil above regulated quantities (1320 gallons). The applicant is in the process of completing similar SPCC plans for the proposed new substations. The submitted SPCC plans, entitled "Environmental Control Requirements for Contractors and Subcontractors" are generally complete and are adequate, however they should be revised to explicitly note required setbacks, and should also note that, although the presence of a sheen is evidence of contamination, certain contaminants may be present at concentrations that exceed drinking water standards even though a sheen is not visible. Consequently, discharge of water from any containment should be avoided in areas where these waters are more likely to impact groundwater quality, including such areas as sandy soils, mapped aquifers and aquifer recharge areas, and shallow-to-bedrock areas. All reasonable precautions should be employed to prevent accumulation of water in containment structures and devices. Copies of the revised individual SPCC plans for substations and similar facilities must be submitted for review and approval. Any SPCC plan or equivalent document developed by a construction contractor due to the volume of petroleum or other material stored must be submitted to the Department within seven days of its receipt by the applicant.

The applicant will obtain several houses prior to and during construction of the project. Many or all of these structures will be demolished. DEA stated it its comments, that each

structure must be surveyed for potentially hazardous materials including lead paint, mercury thermostats, asbestos-containing materials, petroleum products, and other, similar materials along the general lines provided in Appendix 18-2 of the Site application, and information documenting the nature and volume of any materials described and the means of disposal of these materials must be provided to the Department for review prior to the demolition of the structures. This same procedure should be followed for the abandonment of the substations and equipment proposed in this application.

DEA also stated that prior to construction, the applicant must provide to the Department an inventory of all water supply wells, wastewater disposal systems, and similar on-site utilities on properties to be taken for use in the proposed project. Prior to construction of each property, the applicant must specifically identify any wells, disposal systems, or other utilities to be maintained for use; all others must be abandoned in an appropriate manner. The applicant must describe measures to be taken to abandon any well(s) and disposal field(s). Wells generally should be abandoned by filling the well with grout, neat cement, or the equivalent, using a tremie pipe to fill the well from the bottom and gradually withdrawing the pipe as the well fills, in order to reduce the risk of formation of void space within the fill. The casing may be cut off at or below the level of the proposed grade after fill is complete; fill should be to the proposed grade or at least several feet above the bedrock surface. Other measures may be more appropriate if excavation of bedrock around the well is required. Wastewater disposal fields may be abandoned in place, although septic tanks should be pumped and filled with an inert material. Any components of disposal systems that are located in areas to be used during construction should be removed, filled, or flagged and avoided during construction to avoid their collapse under vehicle traffic, unless the applicant knows those components to be rated for such traffic.

DEA further stated that the applicant must be required to follow the herbicide and spill management standards outlined in the Amended VMP.

Therefore, the Department finds that the proposed project will not have an unreasonable adverse effect on ground water quality provided that the applicant follows the standards for herbicide application and spill management outlined in the Amended VMP, submits copies of individual SPCC plans for substations, submits any SPCC plan or equivalent document developed by a construction contractor due to the volume of petroleum or other material stored within seven days of its receipt by the applicant and prior to construction, provides an inventory of all existing water supply wells and existing waste water disposal systems and similar on-site utilities on properties to be taken for use in the proposed project, and submits a description of measures the applicant will take to abandon any well or wastewater disposal systems, all as described above.

14. WATER SUPPLY:

The applicant proposes to construct individual water supply wells at four substations: Albion Road substation, Coopers Mill Road substation, Larrabee Road substation and Raven Farm substation. When completed, each substation will use 100 gallons of water

per day. The applicant submitted an assessment of groundwater supplies that are available on the project site. These assessments were prepared by a certified geologist and were reviewed by, and revised in response to, comments from a DEA geologist. The DEA geologist concluded that there is an adequate supply of groundwater at the four proposed substation locations to support the installation of individual water supply wells.

Based on the assessment and DEA's review, the Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

15. WASTEWATER DISPOSAL:

The applicant proposes to construct individual wastewater holding tanks at four substations: Albion Road substation, Coopers Mill Road substation, Larrabee Road substation and Raven Farm substation. Each individual holding tank will be designed to meet the requirements of the Maine State Plumbing Code. The tanks will be pumped and serviced by a professional septic pumping service as necessary and as stipulated by Maine State Plumbing Code. The applicant submitted the soil survey map and report discussed in Finding 9. This information was reviewed by a Department geologist from DEA who stated that the applicant must submit a contract for routine pumping and maintenance of the proposed wastewater holding tanks prior to operation of the systems.

Based on DEA's analysis, the Department finds that the proposed wastewater disposal holding tanks will be built on suitable soil types and that Maine's Drinking Water Standard for nitrates will be met at the project's property lines provided that the applicant submits a contract for routine pumping and maintenance of the proposed wastewater holding tanks prior to the operation of the systems at the Albion Road substation, Coopers Mill Road substation, Larrabee Road substation and the Raven Farm substation.

16. SOLID WASTE:

To demonstrate that adequate provision has been made for the disposal of the solid waste generated by the project, the applicant submitted Tables 18-1, 18-2 and 18-3, in Section 18 of the application, which list materials generated during the construction of the utility corridors, during construction of the proposed and expanded substations and materials generated during substation decommissioning and the applicant's proposed disposal method of these different wastes. The applicant's plan was reviewed by the Division of Solid Waste Management and was found to be in compliance with Solid Waste Management Regulations of the State of Maine.

The proposed project will result in the disposal of approximately 2,500 used poles and their associated cross arms. Removed poles and cross arms will be donated to private entities for reuse, returned to the manufacturer for recycling or shipped to an approved special waste landfill for disposal. The applicant requires a Pole Transfer Agreement to be signed if any of the treated wood is to be reused by private entities. The applicant submitted a copy of the Pole Transfer Agreement for the Department's review. The Pole Transfer Agreement requires that the treated wood be utilized as a utility pole or

beneficially in accordance with the Chapter 418, Beneficial Reuse, of the Solid Waste Management Regulations of the State of Maine.

The proposed project will clear approximately 1,652 acres of land. Vegetation cleared from the utility corridor will be limited to capable species. All merchantable wood will be removed and sold for lumber or firewood. All other woody debris will be managed in accordance with 12 M.R.S.A. § 9331 – 9336. In addition, the applicant proposes to remove all slash from wetland areas. All other wood waste generated in the process of vegetation clearing will be shipped off-site to be used as fuel at an appropriate licensed boiler, provided to a chip processing plant or donated to a facility to be utilized in the production of erosion control mulch. The applicant's plans for disposal of wood waste are in compliance with Solid Waste Management Regulations of the State of Maine.

The proposed project will not generate any operational wastes.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

17. FLOODING:

Portions of the proposed transmission project are located within the 100-year floodway of rivers or streams. The applicant proposes to place 292 pole structures within the 100 year floodplain. The applicant does not propose to construct any new substations or expansions of substation s within the 100-year floodplain. The applicant states that because of the limited additional impervious area associated with each of the transmission line structures, construction and maintenance of the transmission line will not cause or increase flooding or cause an unreasonable flood hazard to any neighboring structures.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

18. WETLAND IMPACTS:

The applicant proposes to permanently fill 13.71 acres of freshwater wetlands for the installation of poles and the construction of new substations or expanded substations. Of those 13.71 acres, 3.01 acres of fill will be located in freshwater wetlands of special significance. In order to construct the proposed project, the applicant proposes to construct temporary access roads within the transmission line corridors. Temporary access roads that will be in place less than 18 months will alter 51.16 acres of freshwater wetlands of special significance and 58.66 acres of freshwater wetlands. Temporary access roads that will be in place greater than 18 months will alter 4.03 acres of freshwater wetlands of special significance and 5.70 acres of freshwater wetlands. Construction of the improvements to the existing transmission line corridor and the construction of a new transmission line corridor (Segment 15 Alt.) will permanently convert 366 acres of freshwater wetlands from forested habitats to scrub shrub and herbaceous habitats. Construction of the improvements to the existing transmission line

corridor and the construction of a new transmission line corridor will convert 70.21 acres of forest to scrub shrub and herbaceous cover types within significant and U.S. Army Corps of Engineers – jurisdictional vernal pool habitat. It will also convert 13.84 acres of forest to scrub shrub and herbaceous cover types in areas of potentially significant vernal pool habitat and 46.20 acres of forest to scrub shrub and herbaceous cover types within IWWHs. The proposed project will cross 820 streams. Table 9-30 in the NRPA application summarizes wetland impacts and provides stream crossing information associated with the transmission segments. Table 9-32 summarizes the wetland impacts associated with each substation expansion or construction. The applicant also proposes to fill 1,200 linear feet of stream channel for the proposed expansion of the Surowiec Substation in Pownal.

Three general categories of wetland alterations will occur as a result of the construction and maintenance of the proposed project: permanent forested wetland conversion to a wetland type dominated by shrubs, herbaceous and emergent vegetation, permanent wetland fill, and temporary wetland fill. Conversion of forested wetlands will occur when the capable species are permanently removed from the forested wetland and that wetland area is managed to maintain a wetland without trees. Permanent wetland fill will occur at the locations of pole installations, when the poles could not be located outside of the wetland areas, or the expansion of an existing substation or construction of a new substation. Temporary wetland fill will occur for temporary access ways (most of which will utilize construction mats).

The applicant proposes to construct all stream and wetland crossings utilizing erosion and sedimentation controls as outlined in its document entitled "Environmental Guidelines for construction and Maintenance Activities on Transmission Line and Substation Projects" submitted in Section 14 of the Site application.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, provide the framework for the Department's analysis of whether a proposed project's impacts to the protected resources would be unreasonable as that term is used in the NRPA, and whether the project meets the NRPA licensing criteria. A proposed project's impacts may be found to be unreasonable if the project would cause a loss in wetland area, functions and values for which there is a practicable alternative that would be less damaging to the environment. For this aspect of the Department's review an applicant must provide an analysis of alternatives to the project.

A. Avoidance. The applicant submitted an alternatives analysis for the protected natural resource impacts of the proposed project. The applicant stated that because the proposed project includes additions to and improvements of the existing bulk power supply rather than the construction of a new power supply system, the alternatives available to address the project need are defined and somewhat constrained by the location and nature of the existing transmission infrastructure.

The necessity for the project is also the subject of a determination of the PUC. Pursuant to 38 M.R.S.A. § 487-A(2) prior to the start of construction, the applicant must submit evidence to the Department that it obtained the PUC CPCN. The proposed project must

also obtain approvals from the Independent System Operator of New England (ISO-NE), the regional transmission planning authority, and the PUC. Both ISO-NE and PUC require the applicant to demonstrate that the proposed project is a technically sound program for meeting the electrical need of the area.

In order to identify the least environmentally damaging practicable alternative, the applicant conducted a thorough evaluation of the system alternatives and then progressed to site-specific design alternatives. The applicant analyzed three program alternatives including: foregoing implementation of improvements (no action), transmission infrastructure improvements along 37 potential transmission route segments and associated substations (the proposed transmission alternatives) and the creation of strategically placed and timed power generation facilities and conservation/demand management (non-transmission alternatives). The results of the alternatives analysis are described in detail in Section 2 of the NRPA application. The applicant determined that the transmission alternative, specifically the proposed project, meets the project need and purpose while offering the most electrically reliable and cost-effective route solution. The Department finds that the proposed project avoids impacts to the protected natural resources to the greatest extent practicable.

B. Minimal alteration. The amount of protected natural resources to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. Once the applicant determined which program alternative to pursue, it then analyzed potential impacts to freshwater wetlands, special significance wetlands, coastal wetlands, rivers, streams and brooks, significant vernal pool habitats, inland wading bird and waterfowl habitats, deer wintering areas, unusual natural communities, rare plants and rare, threatened and endangered species. The applicant did on the ground field surveys of the proposed route and the substation locations in 2007, 2008, and 2009 to determine the exact locations of these features within and adjacent to the existing transmission corridor so that it could adjust the location of the proposed transmission poles and access roads to minimize impacts to the greatest extent practicable.

Where it is not possible to avoid placing a pole in a scrub shrub or emergent wetland, the applicant proposes to minimize the impact by restoring the disturbed area around the pole and the area used to access it. The applicant will replace the topsoil as discussed in Finding 12, apply mulch and allow the area to re-vegetate naturally, thereby minimizing long term impacts to the wetland. The applicant will minimize impacts to stream and wetlands at existing substations by designing the necessary equipment layout for the upgrade to maximize available upland areas. Five new substations will be constructed. The placement of these substations was somewhat limited by the infrastructure needs and the land available for purchase. The applicant designed the equipment layout of the new substations to minimize impacts to both wetlands and streams.

The proposed project includes crossings for transmission lines of two Outstanding River Segments: the St. George River crossing in Searsmont and the West Branch of the Sheepscot River and Sheepscot River crossings in Windsor and Somerville. The applicant proposes to locate the proposed transmission line in the existing transmission line corridor and cross the rivers at the same location. Siting the crossings in other

locations would require new crossings as part of greenfield corridors, which would create new impacts to natural resources, neighborhoods, and scenic and aesthetic resources. No pole structures will be located in any of these waterbodies. Visual impacts to recreational users of these rivers will range from slight to moderate, and are mitigated by their co-location with other, similar structures. Thus, provided the applicant follows the standards for herbicide application and spill management outlined in the Amended VMP and complies with the provisions discussed in Finding 12, the Department finds that no reasonable alternative exists which would have less adverse effect upon the natural and recreational features of these river segments.

Segment 15Alt. is the proposed 6.4 mile new transmission corridor located in West Gardiner, Litchfield and Monmouth. Segment 15Alt. will include a new 345 kV line and the relocation of an existing 115 kV line. Once Segment 15Alt. is constructed and put into service, transmission poles and conductor wires within 5.8 mile section of Segment 15 will be cut off at existing grade and removed. The applicant stated that they will allow the 5.8 miles of Segment 15 to re-vegetate to the natural cover type to the extent that the applicant's existing easements allow. The applicant will retain the utility rights in that area. An existing AT&T underground telecommunications cable is expected to remain in place.

The portion of Segment 15 that will be removed spans Woodbury Pond. The construction of 15Alt. is anticipated to minimize impacts to Woodbury Pond and other wetlands and streams in Segment 15 (either a support structure would have been needed in Woodbury Pond, or the applicant would be required to realign Whippoorwill Road and construct a new bridge over Woodbury Pond if an alternate route had not been found) and will minimize scenic impacts in the Tacoma lakes region, a densely populated residential area. The widening of Segment 15 would have required the applicant to purchase and remove 13 homes and other accessory buildings and a property in West Gardiner used for municipal services. The proposed Segment 15Alt. will only require the applicant to purchase and remove five homes and accessory buildings. The applicant evaluated the costs of the two different alternatives and the construction of Segment 15 Alt. The construction of Segment 15Alt. will save approximately $850,000. The applicant also examined an alternative route to the south, but it was eliminated because of the length of the corridor which would be required to avoid impacting Woodbury Pond, Sand Pond and Buker Pond.

The Department finds that the proposed project minimizes impacts to protected natural resources. Prior to the start of construction, the location of wetlands, significant vernal pools, IWWH and DWAs along the transmission route and at each expanded or proposed substation must be marked on the ground, and the contractors must be given a plan that specifies the location of wetlands, streams, significant vernal pools, IWWH and DWAs in the work area. The applicant must also maintain a GPS database indicating the location of all wetlands, streams, significant vernal pools, IWWH and DWAs for use during long term maintenance activities.

C. Compensation. Compensation is required to achieve the goal of no net loss of freshwater wetland, coastal wetland, river, stream and brook functions and values. The

applicant conducted a functions and values assessment for freshwater wetlands, special significance freshwater wetlands and coastal wetlands found along the transmission line corridor and at the proposed substation locations.

The applicant determined that forested freshwater wetlands of special significance found within the transmission corridor share similar functions and values. The same is true for forested freshwater wetlands, scrub shrub wetlands and emergent wetlands. Generally, forested freshwater wetlands of special significance found within the transmission corridor share the following functions and values: production export, wildlife habitat, groundwater discharge, floodflow alteration, nutrient removal and transformation and sediment/shoreline stabilization. Forested freshwater wetlands found along transmission corridors share the following functions: production export, wildlife habitat, groundwater discharge, nutrient removal and transformation and sediment/shoreline stabilization. Scrub shrub and emergent wetland functions and values are similar and include: groundwater discharge, floodflow alteration, nutrient removal and wildlife habitats.

The removal of capable tree, sapling and shrub species coupled with ongoing maintenance activities creates permanent early successional communities with different functions and values. Some wetland functions are ecologically improved while others are diminished. Wildlife habitat functions will change benefiting some species but not others. Other functions that are generally improved include: increasing groundwater discharge, floodflow alteration, nutrient removal and sediment retention. Functions and values that are generally diminished include temperature of streams due to the loss of shade, possibly resulting in warmer water temperatures at the site of the project. The applicant argues that the change of wildlife habitat and the loss of shade for streams will not negatively impact the wetlands or stream systems as whole. In contrast, the applicant states that there will be a positive ecological benefit to overall wetland functions and values because more than 90 percent of the State of Maine is forested.

The Department will not require compensation for the conversion of 302 acres of forested freshwater wetlands to scrub shrub wetlands as a result of the permanent removal of capable species from the wetland. The Department determined that this type of cover conversion is not anticipated to unreasonably affect the functions and values of the forested wetlands.

Resource Impacts from Substation Construction or Expansion:
Albion Road Substation: The applicant proposes to fill 3.71 acres (161,653 square feet) of freshwater wetland for the construction of a new substation at this site. The wetland to be filled includes forested and herbaceous types. The functions and values found at this site include wildlife, groundwater discharge, production export, and nutrient removal.

Coopers Mill Substation: The applicant proposes to fill 1.57 acres (68,359 square feet) of freshwater wetland and construct a stream crossing with a permanent access road for the construction of a new substation at this site. The wetland types affected are forested freshwater wetlands, scrub shrub and emergent wetlands. All of these wetlands are considered to be freshwater wetlands of special significance. The functions and values of

the on site wetlands on this site include wildlife habitat, production export and nutrient removal and groundwater discharge.

Highland Avenue Substation: The applicant proposes to fill 0.03 acres (1,136 square feet) of freshwater wetlands for the expansion of this existing substation. The wetland to be filled is a forested freshwater wetland. The functions and values of this wetland include wildlife habitat and groundwater discharge.

Larrabee Road Substation: The applicant proposes to fill 0.35 acres (15,418 square feet) of freshwater wetland for the construction of this new substation. The wetland types are wet meadow and forested freshwater wetlands. Approximately 0.27 acres of fill will be placed within a freshwater wetland of special significance. The functions and values of these wetlands include wildlife habitat and groundwater discharge.

Maguire Road Substation: The applicant proposes to fill 0.30 acres (13,189 square feet) of freshwater wetland for the expansion of this existing substation. The wetland to be filled is a forested freshwater wetland. The functions and values of this wetland include wildlife habitat and groundwater discharge.

Maine Yankee Substation: The applicant proposes to fill 0.04 acres (1,882 square feet) of freshwater wetland for the expansion of this existing substation. The wetland to be filled is scrub shrub and herbaceous wetland. The functions and values of these wetlands are limited to wildlife habitat.

Raven Farm Substation: The applicant proposes to fill 3.25 acres (141,802 square feet) of freshwater wetland for the construction of this new substation. The wetlands to be filled are forested freshwater wetlands and scrub shrub wetlands. The functions and values of these wetlands are groundwater discharge, wildlife habitats and floodflow alteration.

Spring Street Substation: The applicant proposes to fill 0.26 acres (11,108 square feet) of freshwater wetland for the expansion of this existing substation. The wetland to be filled is scrub shrub wetland. The functions and values of this wetland are wildlife habitat, floodflow protection and sediment/toxicant retention.

Surowiec Substation: The applicant proposes to fill 3.35 acres (145,966 square feet) of freshwater wetland for the expansion of this existing substation. Approximately 1,200 linear feet of Runaround brook will also be filled by the expansion. The wetlands to be filled are scrub shrub and emergent wetlands. Approximately 0.80 acres of the wetlands to be filled are considered to be freshwater wetlands of special significance due to their proximity to Runaround Brook. The functions and values of these wetlands include groundwater discharge, nutrient removal and wildlife habitat.

The applicant proposes to compensate for these impacts to freshwater wetlands, and also for the stream impacts and impacts to significant wildlife habitats (including inland wading bird and waterfowl habitats and significant vernal pool habitats). The proposed compensation plan is described in the NRPA application and listed in Exhibit 13.2, last

revised February 25, 2010. It includes 12 different compensation parcels with land area that totals 3,286 acres (described below). In addition, the applicant has proposed to permanently protect the 1,356 acre Kennebec Gorge parcel.

After extensive consultation with both state and federal agencies, the applicant proposes to compensate for the following impacts: temporary wetland fill (short term fill is defined as in place less than 18 months and long term fill is defined as being in place greater than 18 months), permanent cover type conversion of forested wetland (not required by the Department but required by the U.S. Army Corps of Engineers), permanent cover type conversion of High and Moderate Inland Wading Bird and Waterfowl habitat (IWWH), permanent cover type conversion of significant and potentially significant vernal pool habitat, permanent fill in significant vernal pool habitats, permanent wetland fill (both transmission line structure and substations) and stream channel alteration. Exhibit 13.2 of the NRPA application is an explanation of required compensation ratios and how the applicant intends to meet the ratios. Exhibit 13.2 was last revised February 25, 2010 and is summarized below.

- Compensation for 117.5 acres of temporary and long-term wetland fill impacts will be the preservation of 420 acres of the 431 acre Fowler Bog parcel.
- Compensation for 46 acres of permanent cover type conversion in High and Moderate Value IWWH will be accomplished with a combination of three different parcels: preservation of 11 acres of the Fowler Bog parcel, preservation of 68 acres of the Mud Pond parcel and the preservation of 236 acres of the Long Pond parcel.
- Compensation for 70 acres of permanent cover type conversation of significant and U.S. Army Corps of Engineers-jurisdictional vernal pool habitats will be accomplished with a combination of seven different parcels. Six of the parcels will be preserved as significant vernal pool habitats: 56 acres of the Mud Pond parcel, 155 acres of the Long Cove Brook parcel, 162 acres of the Long Pond parcel, 26 acres of the Main Stream parcel, 245 acres of Wilmot Brook parcel and 29 acres of the Day Brook parcel. In addition, six acres of significant vernal pool habitat will be enhanced at the Hutchinson Pond parcel.
- Compensation for 12 acres of permanent cover type conversion in potentially significant vernal pool habitats will be accomplished with the preservation of 50 acres on the Wilmot Brook parcel and 58 acres on the Hutchinson Pond.
- Compensation for 0.5 acres of fill in significant vernal pool habitat will be accomplished with the enhancement of 3.8 acres on the Day Brook parcel.
- Compensation for 13.7 acres of permanent wetland fill will be accomplished in part with the enhancement of 0.6 acres on the Wilmot Brook parcel, 3 acres on the Hutchinson Pond parcel and 10 acres on the Nonesuch River parcel. In addition, 57 acres of wetland and upland will be preserved on the Main Stream parcel. The applicant also elected to make a contribution into the In-lieu-fee (ILF) program of $1,557,809.00 to compensate for the remaining 8.1 acres of permanent fill.

- Compensation for 1,200 linear feet of stream channel fill (Runaround Brook) will be accomplished with the restoration of 100 feet of riparian enhancement for Day Brook on the Day Brook parcel and the creation of 1,700 linear feet of new stream channel for Runaround Brook on the Surowiec Substation parcel.

In addition to the Department's compensation described above, the compensation plan also includes U.S. Army Corps of Engineers components. Department staff visited the proposed compensation parcels during the months of September and October 2009. The compensation parcels are described below:

Fowler Bog: The Fowler Bog property is 431 acres is size. It is located one half mile west of Albion Road in Unity. The property is located along the eastern edge of approximately 10,000 acres of undeveloped land and directly abuts the 114 acre *Rudolph Farm Easement* and the 358 acre *Hawkes-Kenney Farm Easement*. It is located one-quarter of a mile away from the 220 acre Unity College Wetlands Parcel and within one-quarter mile of the U.S. Fish and Wildlife Service *Sunkhaze Meadows National Wildlife Refuge (Sandy Stream Division)*. The property contains approximately 173 acres of wetlands, including Fowler Bog, which extends along the western property boundary, five non-significant vernal pools, 11 acres of mapped high value IWWH, 388 acres of mapped indeterminate value DWA and 2,622 linear feet of stream channels. On site wetlands include black spruce bog, cedar swamp, cedar-red maple swamp, scrub shrub wetlands, forested wetlands and emergent wetlands. Bog Brook flows across the northern portion of the property and a second perennial stream flows through the middle of the property. The middle of the site has been recently forested and there is evidence that the entire parcel has experienced a history of logging. There are a few small borrow pits, four small constructed ponds and unpaved logging roads throughout the site. Functions and values of on site wetlands and streams include groundwater discharge and recharge, floodflow alteration, production export, sediment/toxicant retention, wildlife habitat, recreational opportunities and uniqueness/heritage values. The applicant proposes to convey the property to the Friends of Unity Wetlands (soon to be Sebasticook Regional Land Trust (SRLT)). The Friends of Unity Wetlands/SRLT stated in an undated letter that they are willing to accept ownership of this parcel and that they intend to hold it permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Mud Pond: The Mud Pond parcel is 241 acres in size. It is located off Carver Road in the Town of Monmouth. It is forested and contains 74 acres of freshwater wetlands; three significant vernal pools; 56 acres of significant vernal pool critical terrestrial habitat; three non-significant vernal pools; 68 acres of high value IWWH; 183 acres of indeterminate value DWA; 7,975 linear feet of stream channel; and 4,770 linear feet of shoreline. The property abuts the western boundary of the Stanton Bird Club's 160 acre *Woodbury Bird Sanctuary* parcel. It is located 1.7 miles from *Woodbury Pond State Park*, 5.5 miles from *Peacock Beach State Park* and six miles away from another proposed compensation parcel, *Hutchinson Pond*. A bog and fen system is located adjacent to the shoreline of Mud Pond. It is dominated by eastern white cedar, tamarack, red maple, ericaceous shrubs and sphagnum moss. Functions and values of wetlands and streams on site include groundwater discharge and recharge, floodflow alteration, fish

and shellfish habitat, production export, nutrient removal, sediment/shoreline stabilization, wildlife habitat, educational/scientific value, uniqueness/heritage and visual quality and aesthetics values. The applicant proposes to convey the property to the Stanton Bird Club. The Stanton Bird Club has agreed to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Long Pond: The Long Pond conservation parcel is 456 acres in size. It is located off Spring Hill Road in Mount Vernon. The property contains 222 acres of freshwater wetlands; five significant vernal pools; 162 acres of significant vernal pool critical terrestrial habitat; 14 non-significant vernal pools; 236 acres of mapped high value IWWH; a documented occurrence of a ribbon snake, a species of special concern in Maine; 13,000 linear feet of the western shoreline of Long Pond; and 506 linear feet of stream channels. The property is located at the confluence of Ingham Stream and Belgrade Stream, at the southern tip of Long Pond. Freshwater wetlands include riparian wetlands, stream floodplain wetlands, beaver bogs and isolated forested wetlands. The property is located one mile north of the 1,000 acre *George Bucknam Wildlife Management Area*, 2.1 miles west of the 360 acre *Gawler Wildlife Management Area*, 2.7 miles south of the 63 acre Department of Conservation's *Long Pond Conservation Lands* and four miles south of the 4,000 acres *Kennebec Highlands Conservation Lands*. Long Pond supports brook trout, brown trout, smallmouth bass, largemouth bass, smelt, chain pickerel and white perch. Functions and values of the wetlands and streams on site include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention, nutrient removal, sediment/shoreline stabilization, wildlife habitat and endangered species habitat. The applicant proposes to convey the parcel to Belgrade Regional Conservation Alliance. The Belgrade Regional Conservation Alliance stated in a letter dated November 12, 2009 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Long Cove Brook: The Long Cove Brook compensation parcel is 456 acres in size. It is located south of Savery Road and on the northwest side of Segment 40A in the Town of Searsport. The property contains 88 acres of freshwater wetlands; six significant vernal pools; 155 acres of significant vernal pool critical terrestrial habitat; 12 non-significant vernal pools; 279 acres of mapped indeterminate value DWA; and 6,082 linear feet of stream channel. Several large forested freshwater wetlands interspersed with active and inactive beaver flowages, open water areas, scrub shrub and emergent wetlands and several streams bisect the property. It is located within three miles of *Moose Point State Park* and *Sears Island*, 3.5 miles for *Hurd Pond Wildlife Management Area*, five miles from *Fort Point State Park*, and 2.5 miles from the applicant's other compensation parcels, *Half Moon Stream* and *Main Stream* properties. Functions and values of the wetlands and streams on site include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/shoreline stabilization, wildlife habitat and recreational opportunities. The applicant proposes to convey the parcel to Coastal Mountain Land Trust. The Coastal Mountain Land Trust stated in a letter dated January 6, 2010 that it is willing to accept ownership of this parcel and that it

intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Main Stream: The Main Stream compensation parcel is 83 acres in size. It is located off Sherer Road in Stockton Springs. Main Stream flows north through the property and has large riparian emergent and scrub shrub wetlands associated with the stream channel. The property contains 29 acres of wetlands; one significant vernal pool; 26 acres of significant vernal pool critical habitat; three non-significant vernal pools; and 7,929 linear feet of stream channel. The property is located 2.8 miles from the *Mendall Marsh Wildlife Management Area*, 3.2 miles from *Sandy Point (Stowers Meadows) Wildlife Management Area*, 4.2 miles from *Sandy Point State Park*, five miles of *Fort Point State Park*, contiguous with the proposed *Half Moon Stream* compensation parcel and 2.5 miles from the proposed *Long Cove* compensation parcel. Functions and values associated with the wetlands and streams on site include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention and wildlife habitat. The applicant proposes to convey the parcel to Coastal Mountain Trust. The Coastal Mountain Land Trust stated in a letter dated January 6, 2010 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Wilmot Brook: The Wilmot Brook compensation parcel is 1,186 acres in size. It is located off Pitts Center Road, River Road, Beedle Road and New Road in Richmond. The property is situated near the Kennebec River but has no actual frontage on the river. Wilmot Brook extends southerly across the center of the property. River Road bisects the parcel. A natural gas pipeline bisects the property in a northeasterly direction. The property contains 209 acres of wetlands; 18 significant vernal pools; 295 acres of significant vernal pool critical terrestrial habitat; 30 non-significant vernal pools; one active bald eagle nest; and 38,085 linear feet of stream channel. The applicant proposes to enhance one acre of freshwater wetland by planting shrubs to restore the riparian buffer of Wilmot Brook. The enhancement plan is described on a plan prepared by TRC Companies, Inc. entitled "Enhancement Planting Plan Wilmot Brook Town of Richmond, ME, dated February 25, 2010." The property is located across the river from Land for Maine's Future's *Hiatt Farm* parcel, 2.2 miles north of the *Steve Powell Wildlife Management Area*, 2.4 miles north of Land for Maine's Future's *Alice Wheeler Farm*, 2.4 miles north of *Green Point Wildlife Management Area* and six miles north of the Nature Conservancy's *Abagedasset River Conservation Area*. Functions and values associated with the wetlands and streams on site include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention, wildlife habitat and recreational opportunities. The enhancement area will be monitored annually for five years to insure plant growth. The applicant proposes to convey the parcel to MDIFW. MDIFW stated in an undated letter that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Day Brook: The Day Brook compensation parcel is 54 acres in size. It is located south of Webber Hill Road (State Route 99) in Kennebunk. Day Brook crosses the property. The property contains 12 acres of wetlands:, two significant vernal pools; 29 acres of significant vernal pool critical terrestrial habitat; seven non-significant vernal pools; documented nesting upland sandpipers, which are listed as a threatened species in Maine; and 2,259 linear feet of stream channel. The property is adjacent to MDIFW's *Kennebunk Plains Wildlife Management Area* and the Nature Conservancy's *Kennebunk Plains Preserve*, one mile from the Nature Conservancy's *Wells Barrens Property*, four miles from the *Rachel Carson National Wildlife Refuge, Mousam River Division*, and 2.5 miles from the *Massabesic Experimental Forest*. Functions and values associated with the wetlands and streams on site include groundwater discharge and recharge, fish and shellfish habitat, production export, educational and scientific value, wildlife habitat, uniqueness and heritage values, recreational opportunities and endangered species habitat. The applicant proposes to convey the parcel to MDIFW. MDIFW stated in an undated letter that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

The applicant proposes to restore 100 feet of riparian buffer along Day Brook. Large woody debris will be removed in this section to provide for fish passage and shrubs will be planted to restore the buffer. The applicant also proposes to enhance four acres of significant vernal pool habitat. The area is currently an active corn field. The applicant proposes to take the field out of food production by reseeding it with native grasses. The field is located adjacent to habitat that upland sandpipers utilize; planting native grasses in this field will enlarge the habitat for the upland sandpipers and will restore the significant vernal pool habitat to natural conditions for the area. The restoration and enhancement areas will be monitored annually for five years to insure plant growth.

Hutchinson Pond: The Hutchinson Pond compensation property is 81 acres in size. It is located off Benson Road in the Town of Manchester. The property contains 28 acres of freshwater wetlands; three significant vernal pools; 64 acres of significant vernal pool critical terrestrial habitat; six non-significant vernal pools; 1,675 linear feet of shoreline on Hutchinson Pond; and 2,765 linear feet of stream channel. The applicant proposes to enhance three acres of freshwater wetlands and six acres of significant vernal pool habitat by eliminating two invasive species, glossy buckthorn and common buckthorn. The property is located within one mile of MDIFW's *Jamie's Pond Wildlife Management Area*. Functions and values of on site wetlands and streams include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention and wildlife habitat. The applicant proposes to convey the parcel to Kennebec Land Trust. The Kennebec Land Trust stated in a letter dated January 14, 2010 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

There are two fields on the property that contain glossy buckthorn and common buckthorn. It is thought that the seeds were spread when the fields were brush hogged. Both glossy buckthorn and common buckthorn form dense clusters and spread quickly.

They cause habitat degradation, shade out native species and decrease natural diversity. The applicant proposes to cut the stems as close to the ground as possible, prior to fruit maturation, and the treat the stems with herbicide. Herbicide usage will comply with all label requirements and standards established by the Maine Board of Pesticide Control. Work will be performed by licensed applicators. Applications will not take place when winds on site exceed 15 miles per hour, drift will be minimized, products with low potential for mobility and low persistence will be utilized, no aerial or motorized applications, low-pressure backpack sprayers will be used. The applicant proposes to monitor re-growth of glossy buckthorn and common buckthorn and will treat again during the next growing season if necessary.

Nonesuch River: The Nonesuch River parcel is 91 acres in size. It is located off Joshua Libby Road in the Town of Scarborough. The Nonesuch River bisects the parcel. The property contains 42 acres of wetlands; 14 non-significant vernal pools; and 9,178 linear feet of stream channel, including frontage on the Nonesuch River. The applicant proposes to enhance 10 acres of wet meadow wetland. The property is located upstream from the *Scarborough Marsh Wildlife Management Area*. Functions and values of on site wetlands and streams include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention, nutrient removal, sediment/shoreline stabilization and wildlife habitat. The applicant proposes to convey the parcel to the Scarborough Land Conservation Trust. The Scarborough Land Conservation Trust stated in a letter dated February 19, 2010 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes.. The applicant submitted a draft deed restriction protecting the property in perpetuity.

The applicant proposes to enhance 10 acres of wet meadow wetland by planting trees and shrubs to restore it to a forested and scrub shrub wetland system. This includes re-establishing the riparian floodplain along the Nonesuch River by planting 4,000 trees and shrubs suitable for floodplain conditions. Trees will provide shade and moderate water temperatures. The applicant proposes to plant fruit bearing shrubs to enhance the area as a wildlife travel corridor. The enhancement areas will be monitored annually for five years to insure plant growth.

Half Moon Stream: The Half Moon Stream parcel is 167 acres in size. It is located off Hatch Road in the Towns of Prospect and Stockton Springs. Both Half Moon Stream and Main Stream bisect the property. On site wetland types are forested, scrub shrub, and emergent. The property contains 42 acres of freshwater wetlands; eight non-significant vernal pools; and 9,769 linear feet of stream channels. The property is located 1.8 miles from *Mendall Marsh*, 2.2 miles from *Sandy Point (Stowers Meadows) Wildlife Management Area*, four miles from *Sandy Point State Park*, five miles from *Fort Point State Park*, contiguous with the applicant's proposed *Main Stream* and 2.5 miles from the *Long Cove Brook* compensation sites. Functions and values of on site wetlands and streams include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, sediment/toxicant retention, sediment/shoreline stabilization, wildlife habitat and endangered species habitat. During the spring of 2009, the applicant's consultant observed a wood turtle, a species of special concern, on the

site. The applicant proposes to convey the parcel to the Coastal Mountain Land Trust. The Coastal Mountain Land Trust stated in a letter dated January 6, 2010 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Montsweag Brook: The Montsweag Brook parcel is 27 acres in size. It is located off Freedom Song Lane in the Town of Wiscasset. The property contains two acres of wetlands; 22 acres of indeterminate DWA; and 2,100 linear feet of stream channel (above the dam). Montsweag Brook flows south through the property and is restricted by a dam at the southern property boundary. The pond created by the dam was used as a backup water source for the nearby Mason Station. The pond is no longer needed as a water source for Mason Station. The dam is the second impoundment on Montsweag Brook. The Chewonki Foundation is studying the feasibility of removing the lower dam, which is located on its property, and has expressed an interest in removing the upper dam located on this parcel as well, however no plans for dam removal were submitted by either the applicant or the Chewonki Foundation. The property is connected to the *Chewonki Foundation's Back River Trail* easement; it is located one mile from *Sortwell Memorial Forest*, five miles from the *Earl E. Kelley Wildlife Management Area*, five miles from the *Steve Kelley Wildlife Management Area* and five miles from *Green Point Wildlife Management Area*. Functions and values of on site wetlands and streams include groundwater discharge and recharge, floodflow alteration, fish and shellfish habitat, production export, wildlife habitat, and educational and scientific value. The applicant proposes to convey the parcel to the Chewonki Foundation. The Chewonki Foundation stated in a letter dated January 12, 2010 that it is willing to accept ownership of this parcel and that it intends to hold the property permanently for conservation purposes. The applicant submitted a draft deed restriction protecting the property in perpetuity.

Runaround Brook: Runaround Brook is located at the site of the existing Surowiec Substation off Allen Road in the Town of Pownal, Maine. During initial substation construction, prior to the enactment of the Federal Clean Water Act or the NRPA, the applicant re-routed and channelized Runaround Brook to flow around the boundaries of the existing substation. As a result of the expansion of the substation, approximately 1,200 linear feet of stream channel and its associated riparian wetland will be filled. Runaround Brook is a tributary to Chandler River which is classified as a cold water fishery stream by MDIFW. The slow flow, presence of chain pickerel and limited shade from woody riparian vegetation indicate that Runaround Brook is a warm water fishery. The channelized reach around the substation is overly wide and deep, has unnaturally sharp corners and is straight for long distances. It does not exhibit typical stream habitat features or have sufficient riparian buffers. Behind the substation, floodwaters are prevented from overflowing into the adjoining emergent wetland by a berm; consequently, flood waters periodically encroach into the substation. The berm is most likely the spoils side-cast during the channelization of the brook. Bedrock outcrops are obvious in a few places along the berm. In recent years beavers constructed dams in the brook channel near the south-eastern edge of the existing substation causing additional flooding problems and unsafe conditions at the substation.

The applicant proposes to re-route the brook and create 1,700 linear feet of new stream channel and riparian area. The proposed channel will be three feet wide and less than three feet deep and will be located in the center of a 20 foot wide constructed floodplain area. It will be as sinuous as possible considering site constraints (substation, transmission lines, ledge outcrop and topography). The applicant proposes to plant a mixture of shrubs and trees within the floodplain area. The proposed relocation of Runaround Brook is shown on a plan prepared by TRC Companies, Inc. entitled "Runaround Brook Relocation & Restoration Plan Surowiec Substation" and dated December 16, 2009. The goal of the proposed stream restoration/relocation is to establish a more naturally functioning stream channel, with connectivity to a functioning floodplain and to establish a riparian buffer along the restored channel. The applicant proposes to have a pre-construction meeting on site with Department staff, its consultant and a fluvial hydrogeologist. The applicant proposes to monitor the stream restoration project annually for five years and submit reports, including a post-construction report to the Department prior to December of each year. The applicant will retain ownership of the parcel. Fifty feet of land on either side of the location of the stream restoration project, except for a portion of land lying 25 feet as measured perpendicularly from the applicant's Surowiec Substation fence line, will be protected in perpetuity with a deed restriction.

Kennebec Gorge: The applicant also proposes to permanently protect the Kennebec Gorge parcel, which includes 1,356 acres along the Kennebec River beginning just below the Harris dam and extending south towards The Forks. The property is located in West Forks Plantation and Moxie Gore. It includes nine miles of shoreline on the west bank and seven miles of shoreline on the east bank of the river. The property includes 20 miles of riverfront and it abuts or is near seven other compensation parcels. This section of the river is well known for its exceptional white water rafting and healthy populations of brook trout, landlocked salmon, and rainbow trout. While the addition of this property into the applicant's compensation plan is not required to meet the minimum state or federal compensation thresholds, it is included in the applicant's proposal. The applicant stated that it intends to include it in the compensation plan for the proposed project because it will preserve in perpetuity the natural beauty and resources of a truly exceptional recreational site in the State of Maine. The applicant is discussing the possibility of transferring ownership of this parcel with several entities, including the Department of Conservation. The applicant intends to transfer the parcel with the Department's standard deed restriction language.

Based on a review of the proposed impacts to protected resources and the proposed compensation plan, the Department finds that the applicant has avoided and minimized protected natural resource impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging practicable alternative that meets the overall purpose of the project. Prior to the start of construction, the applicant must submit a copy of the CPCN from the PUC, and a payment of $1,557,809.00 to the ILF program administrator at 17 State House Station, Augusta, Maine 04333. Within 60 days of the date of this Order, the applicant shall submit signed and recorded deed restrictions for each compensation parcel. During project construction and in areas altered by the installation of poles, the applicant must replace the topsoil,

apply hay mulch and allow any disturbed wetland areas to re-vegetate naturally. Prior to starting construction at the Surowiec Substation, the applicant must hold a pre-construction meeting on site with Department staff, its consultant and a fluvial hydrogeologist to discuss the Runaround Brook stream restoration/relocation project. The applicant must implement the restoration and enhancement plans at Hutchinson Pond, Nonesuch River, Day Brook and Wilmot Brook compensation properties prior to June 2011. The Department further finds that the Kennebec Gorge parcel must be permanently protected with a conservation easement or transferred with the Department's standard deed restriction language, within one year of the date of this Order.

Annual monitoring of enhancement and restoration conditions at the Hutchinson Pond, Nonesuch River, Day Brook, Wilmot Brook and Runaround Brook sites must be completed for five years, and must include the submission of a post-construction report. Annual monitoring reports for the Hutchinson Pond, Nonesuch River, Wilmot Brook, Day Brook and Runaround Brook sites must be submitted no later than the end of December of each year. Prior to the start of construction of each segment, the location of wetlands along the transmission route and at each expanded or proposed substation must be marked on the ground, and the contractors must be given a plan that specifies the location of both wetlands and streams in the work area. The applicant must also maintain a GPS database indicating the location of all wetlands, streams, and other significant habitats for use during long term maintenance activities.

19. AIR QUALITY:

The applicant stated that it may deploy one or more temporary, portable (trailer-mounted) two-megawatt distributed generation units during and immediately following MPRP construction. The units are fueled with low- or ultra-low sulfur diesel fuel. Up to four of these units may be installed, as needed, at any substation site. The applicant retains an Air Emissions License (#A-952-71-A-N, dated November 2, 2006) that regulates air emissions, heat output, fuel sulfur content, and maximum fuel consumption of the units.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses provided the applicant adheres to its roadside buffer planting plan as discussed in Finding 6.

B. The proposed activity will not cause unreasonable erosion of soil or sediment.

C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat,

travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant: 1) constructs and maintains the project in accordance with the Amended VMP, 2) constructs stream crossings as described in Finding 7, 3) constructs and maintains the project in accordance with MDIFW's document entitled "Maine Power Reliability Program: Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" last revised November 24, 2009 or the latest revision, 4) submits a copy of the MDIFW approved ITP as described in Finding 7, and 5) install aviation marker balls or other line collision deterrents on shield wires at the transmission line crossings listed in Finding 7; provided that, prior to the start of project construction, the applicant 6) submits evidence to the Department that it obtained the PUC's CPCN, 7) submits the ILF payment of $1,557,809.00 as discussed in Finding 18, and 8) holds a pre-construction meeting for the project including the Surowiec substation; provided that, prior to the start of construction on any specific parcel of land the applicant 9) marks on the ground the location of wetlands along the transmission route and at each expanded or proposed substation ; provided that, within 60 days of the date of this Order, 10) submits a copy of the signed and recorded deed restrictions for each compensation parcel; provided that, prior to June 2011 the applicant 11) implements the restoration and enhancement plans at Hutchinson Pond, Nonesuch River, Day Brook and Wilmot Brook compensation properties, 12) replaces topsoil and applies hay mulch, 13) monitors the enhancement and restoration conditions at the Hutchinson Pond, Nonesuch River, Day Brook, Wilmot Brook and Runaround Brook sites, and 14) maintains a GPS database indicating the location of all wetlands, streams, and other significant habitats, all as discussed in Finding 18.

E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.

F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.

H. The proposed activity is not on or adjacent to a sand dune.

I. The proposed activity is not located in an outstanding river segment as noted in 38 M.R.S.A. Section 480-P, but will cross two such segments. No reasonable alternative to these crossings exist that will have less adverse effect on the outstanding river segment.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that prior to construction on each segment, the applicant must submit to the BLWQ a redacted copy of all deeds, leases, and easements for that segment. The applicant must

indicate, on a tax map, which properties it intends to apply eminent domain authority over and work may not begin on those properties or any other properties for which the applicant has not acquired ownership or usage rights, until the applicant has submitted proof that eminent domain authority has been applied or those rights have been obtained..

B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities provided that: 1) sound barriers are constructed and 3.2 acres of the Day Brook compensation parcel is retained as discussed in Finding 5, 2) the applicant adheres to the proposed plan for roadside visual buffers and earthen berms and the applicant plant a 25 foot wide by 50 foot long buffer along the banks of Jock Stream as described in Finding 6, 3) the applicant constructs and maintains the project in accordance with the Amended VMP, 4) prior to the start of construction, the applicant develops an invasive species vegetation monitoring plan for the project and submit it to the Department for review and approval, 5) prior to the start of construction on Segments 15 or 15 Alt. the applicant must submit the buffer plan for the Route 132 crossing in Wales as described in Finding 6 and 6) the applicant must comply with the terms and conditions outlined in the MOA dated February 8, 2010 between U.S. Army Corps of Engineers, MHPC and the Advisory Council on Historic Preservation.

C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that the applicant submits a contract for routine pumping and maintenance of the proposed wastewater holding tanks prior to the operation of the systems at the Albion Road substation, Coopers Mill Road substation, Larrabee Road substation and the Raven Farm substation.

D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that, prior to the start of construction, the applicant conducts a pre-construction meeting, retains third party inspector services, and retains its design engineer to monitor and document the construction of stormwater structures, as described in Finding 12.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that 1) the applicant follows the standards for herbicide application and spill management outlined in the Amended VMP, 2) submits copies of individual SPCC plans for substations and any SPCC plan or equivalent document developed by a construction contractor, and 3) prior to construction on any property containing existing water supply wells and waste water disposal systems, the applicant shall provide an inventory of all existing wells, disposal systems and similar on-site utilities on the affected properties , and a description of measures the applicant will take to abandon any well or wastewater disposal systems, as discussed in Finding 13.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and

the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of CENTRAL MAINE POWER COMPANY to construct the Maine Power Reliability Program project as described above, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.

2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. The applicant or other responsible party shall, within three months of the expiration of each five-year interval from the date of this Order, submit a report certifying that the items listed in Department Rules, Chapter 500, Appendix B(4) have been completed in accordance with the approved plans.

5. The applicant shall submit evidence to the Department that it obtained the PUC Certificate of Public Convenience and Necessity prior to implementation of eminent domain power.

6. Prior to construction on each segment, the applicant shall submit to the BLWQ a redacted copy of all deeds, leases, and easements for that segment. The applicant shall indicate, on a tax map, which properties it intends to apply eminent domain authority over and work may not begin on those properties or any other properties for which the applicant has not acquired ownership or usage rights, until the applicant has submitted proof that eminent domain authority has been applied or those rights have been obtained.

7. Within 60 days of the start of operation of each substation, that applicant must submit to the Department for review and approval as-built plans denoting the locations and dimensions of each constructed sound level barrier as discussed in Finding 5.

8. Within 60 days after the completion of each segment or by the end of the next spring or fall planting season, the applicant shall implement the roadside visual buffer planting plan as outlined in Finding 6.

9. Within 60 days of the completion of each substation, the applicant shall implement the visual buffer planting plan and construct all earthen berms as outlined in Finding 6.

10. Prior to the start of construction on Segments 15 or 15 Alt. the applicant shall submit a buffer plan for the Route 132 crossing in Wales, for review and approval, as described in Finding 6.

11. Prior to the start of project construction, the applicant shall submit payment of $1,557,809.00 to the ILF program administrator at 17 State House Station, Augusta, Maine 04333.

12. The applicant shall construct and maintain the project in accordance with the document entitled "Vegetation Management Practices: Maine Power Reliability Program" last revised March 31, 2010 (Amended VMP) and attached to this order as Appendix B.

13. The applicant shall comply with the terms and conditions outlined in the MOA dated February 8, 2010 between U.S. Army Corps of Engineers, MHPC and the Advisory Council on Historic Preservation.

14. Within 60 days of the date of this Order, the applicant shall submit copies of individual SPCC plans for substations for review and approval. Any SPCC plan or equivalent document developed by a construction contractor due to the volume of petroleum or other material stored shall be submitted to the Department within seven days of its receipt by the applicant.

15. Prior to construction on any property containing existing water supply wells and waste water disposal systems, the applicant shall provide an inventory of all existing wells, disposal systems and similar on-site utilities on the affected properties , and a description of measures the applicant will take to abandon any well or wastewater disposal systems.

16. Within 60 days of the date of this Order, the applicant shall submit signed and recorded deed restrictions for each compensation parcel, with the exception of the Kennebec Gorge property for which the applicant shall submit signed and recorded deed restrictions within one year of the date of this Order.

17. All permanent stream crossings shall be constructed with the bottom of the culvert embedded six inches into the soil and a culvert diameter equal to 1.2 times the stream bank width.

18. The applicant shall install aviation marker balls or other line collision deterrents on shield wires at the transmission line crossings listed in Finding 7.

19. During project construction and in areas altered by the installation of poles, the applicant shall replace the topsoil, apply hay mulch and allow any disturbed wetland areas to re-vegetate naturally.

20. The applicant shall implement the restoration and enhancement plans at Hutchinson Pond, Nonesuch River and Wilmot Brook compensation properties prior to June 2011.

21. Annual monitoring of enhancement and restoration conditions at the Hutchinson Pond, Nonesuch River, Wilmot Brook and Runaround Brook sites shall be completed for five years, and shall include the submission of a post-construction report. Annual monitoring reports for the Hutchinson Pond, Nonesuch River Wilmot Brook and Runaround Brook sites shall be submitted no later than the end of December of each year.

22. Prior to the start of construction on each segment, the location of wetlands, streams, significant vernal pools, IWWH and DWAs along the transmission route and at each expanded or proposed substation shall be marked on the ground, and the contractors shall be given a plan that specifies the location of wetlands, streams, significant vernal pools, IWWH and DWAs in the work area. The applicant shall also maintain a GPS database indicating the location of all wetlands, streams, significant vernal pools, IWWH and DWAs for use during long term maintenance activities.

23. The applicant shall retain a minimum of four third-party inspectors to monitor erosion control and the protection of natural resources on the project site during construction. Each inspector will be responsible for no more than 100 linear miles of transmission line corridor and no more than four substation projects. Prior to the start of each transmission line segment and prior to the start of each substation construction or expansion, the applicant shall arrange to meet with the appropriate third-party inspector to discuss the construction sequence for each segment or substation and strategies for minimizing potential impacts to protected natural resources. The applicant shall develop its construction plan with input from the appropriate third-party inspector.

24. Prior the start of construction on any segment and at any substation, the applicant shall conduct a pre-construction meeting. This meeting shall be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspectors.

25. Prior to starting construction at the Surowiec Substation, the applicant shall hold a pre-construction meeting on site with Department staff, its consultant and a fluvial hydro-geologist to discuss the Runaround Brook stream restoration/relocation project.

26. Within 60 days of the date of this Order, the applicant shall execute and record all required deed restrictions, except for deed restrictions on compensation parcels described in Special Condition 16, including the appropriate buffer and stormwater deed restrictions. The applicant shall submit a copy of the recorded deed restriction, including the plot plan, to the Department within 60 days of its recording.

27. Prior to the start of construction at any substation or transmission line segment, the location of all buffers shall be permanently marked on the ground.

28. Prior to the start of construction on any individual segment or substation known to contain invasive species, the applicant shall develop an invasive species vegetation monitoring plan for the project and submit it to the Department for review and approval.

29. The applicant shall construct and maintain the project in accordance with MDIFW's document entitled "Maine Power Reliability Program: Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" last revised November 24, 2009 or the latest revision.

30. The applicant shall submit a copy of the MDIFW approved ITP for black racer snakes to the BLWQ prior to starting construction at the Maguire Road substation.

31. Prior to operating the wastewater systems at the Albion Road substation, Coopers Mill Road substation, Larrabee Road substation and the Raven Farm substation, the applicant shall submit a contract for routine pumping and maintenance of the proposed wastewater holding tanks.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 5th DAY OF April, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

FILED
APR - 5 2010
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

deh, mr, bc/l#24260anbncndnen/ats#70136, 70137, 70154, 70155, 70156

Appendix A

MPRP Municipalities Organized by County
78 Municipalities / 13 Counties

Androscoggin County
Auburn
Durham
Greene
Leeds
Lewiston
Livermore Falls
Minot
Wales

Cumberland County
Cumberland
Gorham
New Gloucester
North Yarmouth
Pownal
Scarborough
South Portland
Westbrook
Yarmouth

Franklin County
Jay

Hancock County
Bucksport

Kennebec County
Albion
Augusta
Benton
Chelsea
China
Clinton
Farmingdale
Gardiner
Litchfield
Monmouth
West Gardiner
Windsor
Winslow

Knox County
Appleton
Warren
Washington
Lincoln County
Jefferson
Somerville
Waldoboro
Whitefield
Wiscasset
Oxford County
Canton
Dixfield
Peru
Rumford
Penobscot County
Dixmont
Orrington
Plymouth
Sagadahoc County
Bowdoinham
Woolwich
Somerset County
Cornville
Detroit
Madison
Pittsfield
Skowhegan
Waldo County
Belfast
Brooks
Burnham
Frankfort
Liberty
Monroe
Montville
Morrill
Prospect
Searsmont
Searsport

Stockton Springs
Swanville
Troy
Waldo
Winterport

York County

Arundel
Biddeford
Eliot
Kennebunk
North Berwick
Saco
South Berwick
Wells

Amended VMP

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Appendix B

Vegetation Management Practices: Maine Power Reliability Program (Last Revised March 31, 2010)

This document applies to the transmission lines carrying 100 kV or more and/or generator leads for the Maine Power Reliability Program project.

If a standard in this appendix requires "avoid and minimize", then avoidance is the preferred and required alternative to minimization where practicable.

1. General vegetation management performance standards. **The following apply in all categories of protected natural resources and critical habitats**

   A. Arboricultural Management Practices

      (1) Capable vegetation may be removed and controlled within the transmission line corridor portions of the development. Capable vegetation is defined as species that are capable of growing to a height that would reach the conductor safety zone as illustrated in Figure 1A and 1B attached to this appendix. Most tree species in Maine are defined as capable vegetation; a partial list of non-capable species is provided in Table 1 attached to this Appendix.

      For useful guidance, see North American Reliability Corporation standard, FAC-003-1, Transmission Vegetation Management Program, as amended.

      (2) When and if terrain conditions permit (e.g., certain ravines and narrow valleys) capable vegetation must be permitted to grow within and adjacent to protected natural resources or critical habitats where maximum growing height can be expected to remain below the conductor safety zone. Narrow valleys are those that are spanned by a single section of transmission line, pole-to-pole.

      (3) Locations within the MPRP that contain invasive plant species, as identified in Table 2 below, will be identified prior to the start of construction of the project or the start of construction on any individual segment of the project at the discretion of the applicant. The applicant shall develop an invasive species vegetation monitoring plan and submit it to the Department for review and approval prior to the start of construction on the project. The vegetation monitoring plan must have a stated objective of preventing the introduction and spread of invasive species as a result of construction. Herbicide application is an acceptable method of controlling invasive growth, when hand removal or other non-chemical methods will not be effective, including in protected natural resources and other sensitive areas.

Table 2 – Invasive Plant Species

Species	Common Name
1. Acer platanoides	Norway maple
2. Alliara petiolata	Garlic mustard
3. Berberis thunbergii	Japanese barberry
4. Celastrus orbiculatus	Oriental bittersweet
5. Cynanchum louiseae	Black swallowwort
6. Elaeagnus umbellata	autumn olive
7. Fallopia japonica	Japanese knotweed
8. Frangula alnus	glossy buckthorn
9. Lonicera morrowii	Morrow's honeysuckle
10. Lonicera tatarica	tatarian honeysuckle
11. Lythrum salicaria	purple loosestrife
12. Phragmites australis	common reed
13. Rhamnus cathartica	common buckthorn
14. Rosa multiflora	multiflora rose

(4) When capable vegetation within and adjacent to a protected natural resource or identified critical habitat must be removed for the purpose of constructing the development, the natural re-generation of non-capable woody vegetation must be allowed within all protected resources as defined in Section 9(B) and special habitats as defined in Section 15(B)(1). At a minimum, the natural re-generation of non-capable woody vegetation must be allowed. To facilitate the regeneration of natural vegetation within and adjacent to protected resources as defined in Section 9(B) and special habitats as defined in Section 15(B)(1), the contractor must separate the topsoil from the mineral soil when excavating during project construction. The excavated topsoil must be returned to its original place and position in the landscape and appropriate erosion control methods must be utilized.

B. Herbicide application

(1) Herbicide usage must comply with all label requirements and standards established by the Maine Board of Pesticides Control (MBPC), as amended from time to time. Herbicide restrictions and approvals are governed by MBPC. Some key standards include the following.

(a) Use of only trained applicators working under licensed supervisors.

(b) Awareness of the impacts of climatic conditions prior to application.

(c) Application must not take place when wind speed exceeds 15 MPH as measured on-site at the time of application The application must be administered in such a manner that drift will be minimized to the extent practicable.

NOTE: The use of combinations of herbicides and surfactants/adjuvants is governed by the United States Environmental Protection Agency (USEPA) and label requirements

(2) Products with low potential for mobility and low persistence in the environment must be selected for use in sensitive resource areas. When operating within riparian areas, SVPs, and IWWHs the following is required.

(a) The following are the only herbicides that may be used within riparian areas, SVPs, and IWWHs unless otherwise authorized by the department prior to application

(i) 2,4-D salt formulation, NOT the ester formulation.

(ii) Glyphosate.

(iii) Imazapyr.

(iv) Fosamine Ammonium.

(v) Aminopyralid Triisopropanolammonium.

(vi) Metsulfron methyl.

(3) The following surfactants, as well as others approved by the department in consultation with MDIFW may be used within riparian areas, SVPHs, and IWWHs.

(a) Agri-Dex.

(b) Competitor.

(c) Dyne-Amic.

(d) Clean Cut.

(e) Cide-Kick.

(f) Nu-Film IR.

(g) Induce.

(h) Chemsurf90.

(i) 41-A

(4) Herbicides must be applied in accordance with USEPA label requirements to minimize wash-off.

(5) There may be no aerial or motorized application of herbicides.

(6) Pre-application planning meetings with the contractor must be conducted.

(7) The electric utility owner or agent must closely supervise and inspect all protected natural resource areas during application.

(8) Low-pressure, manual backpack sprayers, with appropriate nozzles to minimize drift, must be used.

(9) Herbicide application must be specific to individual targeted species.

(9) The owner or agent must conduct post-treatment inspection.

(10) No herbicide may be stored, mixed or loaded within 100 feet of any wetland or surface water.

(11) Herbicides may not be applied within the following setbacks from drinking water supplies.

(a) Water supply wells.

(i) 100 feet from a known private well, and 200 feet from a public water supply well, for any product with an active ingredient listed in the Agricultural Research Services' Pesticide Properties Database as having a Pesticide Leaching Potential of low or very low.

(ii) 200 feet from a known private well, and 400 feet from a public water supply well, for any product with an active ingredient listed in the Agricultural Research Services' Pesticide Properties Database as having a Pesticide Leaching Potential of intermediate, high, or very high.

(b) Surface water sources and springs.

(i) 100 feet from a known private intake or spring, and 200 feet from a public water supply intake, for any product with an active ingredient listed in the Agricultural Research Services' Pesticide Properties Database as having a Pesticide Solution Runoff Potential or Pesticide Adsorbed Runoff Potential of low or very low, or for any product applied only by cut surface treatment, thin-line or low-volume basal, or low-volume foliar application.

(ii) 200 feet from a known private intake or spring, and 400 feet from a public water supply intake, for any product with an active ingredient listed in the Agricultural Research Services' Pesticide Properties Database as having a Pesticide Solution Runoff Potential or Pesticide Adsorbed Runoff Potential of intermediate or high.

(c) If requested by the applicant, the department may waive this restriction for private water supplies owned or controlled by the applicant or any water supply to be abandoned in a manner approved by the department during construction of the development. The department may require greater setbacks from public water supplies if recommended by the Department of Health and Human Services, or from any water supply if it determines that soil conditions, use of the supply, or other relevant considerations warrant such increases.

(12) Herbicides may not be applied within 25 feet of the following:

(a) Any surface waters of the State.
(b) Wetlands with open water at the time of application.
(c) Significant Vernal Pool depressions (whether there is standing water or not).
(d) An area listed in Maine's biological conservation data system, Biotics, of the Maine Natural Areas Program, including rare natural communities and ecosystems (state rarity rank of S1 through S3 and habitats supporting Endangered or Threatened plant species). Boundaries and locations are as determined by the Maine Natural Areas Program of the Department of Conservation.
(e) Habitat of any species declared rare, threatened or endangered by the Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, or the Director of the U.S. Fish and Wildlife Service.

The setbacks from areas listed in (d) and (e) above may be increased by the department upon the recommendation of one or more of the agencies listed in those provisions.

C. Spill management.

(1) Any spill or release of petroleum products or other hazardous material within a utility transmission line corridor must be managed in accordance with the Spill Contingency Plan approved by the department.
(2) The plan must include the following setbacks unless the applicant can demonstrate that, due to special circumstances at specified locations, these setbacks are impractical at those locations.

(a) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity may occur within 100 feet of a protected wetland or other waterbody.

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(b) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity may occur within 200 feet of a private water supply.

(c) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity may occur within 400 feet of a public water supply.

(d) No fuel storage, vehicle/equipment parking and maintenance and refueling activity may occur within 25 feet minimum of the following:

(i) An area listed in Maine's biological conservation data system, Biotics, of the Maine Natural Areas Program, including rare natural communities and ecosystems (state rarity rank of S1 through S3 and habitats supporting Endangered or Threatened plant species). Boundaries and locations are as determined by the Maine Natural Areas Program of the Department of Conservation.

(ii) Habitat of any species declared rare, threatened or endangered by the Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, or the Director of the U.S. Fish and Wildlife Service.

The setbacks from areas listed in (i) and (ii) above may be increased by the department upon the recommendation of one or more of the agencies listed in those provisions.

D. Defining boundaries of setbacks

(1) The boundaries of all setbacks defined in subsections (B) and (C) must be clearly marked in the field, or designated areas outside of those boundaries must be established for fuel storage, vehicle/equipment parking and maintenance, refueling, and storage, mixing, or loading of herbicides and shown on the plans, prior to initial line clearing and flagged or located with a global positioning system (GPS) prior to any maintenance operations. Setbacks from wells for herbicide application must be clearly marked in the field.

(2) Prior to routine applications of herbicides as part of right-of-way maintenance, the applicant must determine whether or not additional sections of the right-of-way are affected as a result of new public or private water supplies, and clearly mark in the field or located with GPS the boundaries of any such water supplies prior to these applications, so that the setbacks defined in subsections (B) and (C) can be maintained. The applicant is not required to maintain herbicide application setbacks from water supplies outside of the right-of-way that are no longer in use.

E. Construction Matting

(1) The following requirements apply to timber mats or matting used for any construction purposes. Timber mats or matting:

- shall not be made from wood from ash trees (*Fraxinus sp*);
- with unfinished timbers used in the construction of the mats must be free of bark;
- before entering the State of Maine shall be cleaned of soil and vegetative material by pressure washing;
- shall not have been used in, or made from lumber from, Federally Quarantined areas as set out in 7 CFR 301 unless accompanied by the appropriate USDA certificate of treatment required for interstate transport. Said certificates will be maintained in a central filing

location available for review by appropriate Agency personnel for a period of three (3) years after project completion, as determined by CMP; and,

- must have shipping information sufficient to identify the shipper and number and shipping origin of the mats.

The Maine Forest Service and U. S. Department of Agriculture reserve the right to inspect mats and matting material for compliance with these standards.

2. Stream alterations and riparian natural buffers

A. Riparian natural buffers (or "riparian buffers) must be retained within 100 feet of all Class A, AA, outstanding river segments, or rivers, streams, or brooks containing Threatened or Endangered species unless the department determines that the functions and values of the riparian buffer will not be impacted by the removal of vegetation and approves an Alternative minimum buffer. A "riparian buffer" is a buffer on a stream, river, or brook. In no case may the riparian buffer be reduced to less than 25 feet. The riparian buffer is measured horizontally from the top of the stream bank. Class A & AA rivers, streams and brooks are listed in Title 38 M.R.S.A. § 467 and 468 and can be found at the Department's website: http://www.maine.gov/dep/blwq/docmonitoring/classification/index.htm

B. Riparian buffers on rivers, streams or brooks other than those described in (1) must include all areas within 25 feet of the river, stream or brook unless the applicant demonstrates that functions and values of the riparian buffer will not be impacted by the removal of vegetation. The riparian buffer is measured horizontally from the top of bank.

C. The placement of structures within a riparian buffer must be avoided to the maximum extent practicable and is not allowed unless specifically approved by the department.

D. All riparian buffers must be flagged in the field prior to initial line clearing and flagged or located with a global positioning system (GPS) prior to any maintenance operations.

E. No accumulation of slash may be left within fifty (50) feet, horizontal distance, of the top of the stream bank. In all other areas slash must either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than eighteen (18) inches above the ground. Any debris that falls below the normal high-water line of a water body or tributary stream shall be removed.

F. Unless frozen, streams must be crossed using mats or bridges. Streams may not be forded, except as provided in (H) below. The Department prefers the use of mats and bridges, however, in specific instances culverts may be installed during the construction of the temporary access roads provided that the streams to be culverted are not: Class A or AA waters, outstanding river segments, do not support salmon or other coldwater fisheries, or contain threatened or endangered species. These culverts must be installed when the stream channel is dry, the stream may be dammed and pumped around the construction site, and the culverts must be embedded six inches into the soil and sized so that the diameter is equal to 1.2 times the bank full width of the stream. The stream channel must be restored to natural conditions when the culverts are removed.

G. Initial clearing within a riparian buffer must be undertaken during frozen ground conditions whenever practicable, and if not practicable, the recommendations of the third-party inspector must be followed regarding appropriate techniques to minimize disturbance to the maximum extent practicable, such as the use of travel lanes to accommodate mechanical equipment use within the riparian buffer.

H. No mechanized equipment except All Terrain Vehicles (ATVs) for maintenance and inspection or as provided in (F) above, may be operated in any river, stream or brook or associated riparian buffers in order to minimize stream bank impacts.

I. Within all riparian buffers impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

3. Wetlands

A. The wetland vegetation management minimum performance standards apply to all delineated wetlands within the development unless the department determines that the functions and values of the wetlands will not be impacted by the removal of vegetation.

B. All delineated freshwater wetlands must be flagged in the field prior to initial line clearing and flagged or located with GPS prior to any maintenance operations.

C. If initial clearing or other construction activities result in areas of bare soil or minimally vegetated cover, the areas of bare soil must be allowed to re-vegetate naturally, where practicable. If areas are sufficiently large to warrant planting, a native seed designed to provide short term cover must be applied, and the area must be allowed to return to non-capable native woody and perennial herbaceous vegetation naturally.

D. No accumulation of slash may be left within fifty (50) feet, horizontal distance, of the edge of an emergent marsh or open water the wetland. In all other areas slash must either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than eighteen (18) inches above the ground. Any debris that falls into the emergent marsh or open water wetland shall be removed.

E. Initial utility transmission line corridor clearing, slash removal and non-emergency infrastructure maintenance within wetlands must be undertaken during frozen ground conditions whenever practicable. If not practicable, appropriate techniques to minimize disturbance to the maximum extent practicable, such as the use of pre-established cutting lanes to accommodate mechanical equipment use within saturated or inundated wetlands.

F. Within these freshwater wetlands, impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

4. Significant Vernal Pools Habitat (SVPH)

A. The SVPH standards in this section apply to all SVPHs identified within the development and any portion of a SVPH that extends onto the development site and is included or eligible for inclusion on the State's SVPH GIS data layer, unless the department determines that the functions and values of the SVPH will not be impacted by the project.

B. Field Geographic Information System (GIS) data maintained by the Department of Inland Fisheries and Wildlife must be used to avoid SVPHs to the maximum extent practicable

Note: All vernal pools (significant and non-significant) identified by the permittee are provided to MDIFW and placed on the State's SVPH GIS data layer.

C. The utility corridor must be sited in a manner that avoids and minimizes fragmentation of the habitat area to the maximum extent practicable. If impacts are necessary within a SVPH, the development must be sited as close as practicable to the outside edge of the SVPH in a location that minimizes fragmentation of the habitat area to the maximum extent practicable.

D. All identified SVPHs must be flagged in the field prior to initial line clearing and flagged or located with GPS prior to any maintenance operations.

E. Equipment travel is prohibited within the SVPH depression (the significant vernal pool). The removal of capable species must be accomplished using hand cutting or "reach-in" techniques to cut and remove trees.

F. Clearing and mechanical maintenance of vegetation within 250 feet of a SVPH depression is prohibited between April 1st and June 30th. Maintenance clearing between April 1st and June 30th within the 250-foot critical terrestrial habitat must utilize hand tools only (e.g. brush hooks, chainsaws and selective herbicide applications), unless otherwise approved by the Department. No vegetation maintenance operations may occur within 25 feet of a vernal pool depression during this time period.

G. No accumulation of slash shall be left within fifty (50) feet, horizontal distance, of the edge of a SVPH depression. In all other areas slash must either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than eighteen (18) inches above the ground. Any debris that falls into the SVPH depression must be removed.

H. New construction and non-emergency infrastructure maintenance within a SVPH must be undertaken during frozen ground conditions. In the event that it is not practicable, vegetation within the SVPH must be removed using hand cutting or "reach-in" techniques. If hand cutting or "reach-in" techniques alone are not adequate to facilitate the removal of vegetation due to the size of the SVPH, travel lanes to accommodate mechanical equipment within the 250-foot critical terrestrial habitat may be used with the approval of the department.

I. Within a SVPH impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

J. The permittee must have the third-party inspector provide oversight to the clearing of SVPH areas during construction.

5. Inland Waterfowl and Wading Bird Habitat (IWWH)

A. The IWWH vegetation management minimum performance standards apply to all moderate or high value IWWHs that are located wholly or in part within the development unless the department determines that functions and values of the IWWH will not be impacted by the removal of vegetation

B. Use field GIS data in concert with the State's database to site projects to avoid IWWH habitats to the maximum extent practicable.

C. All IWWHs must be field verified during the final stages of design and all identified IWWHs must be flagged in the field prior to initial line clearing and flagged or located with GPS prior to any maintenance operations.

D. Initial clearing, slash removal, and non emergency infrastructure maintenance within an IWWH habitat must be undertaken during frozen ground conditions. In the event that it is not practicable, vegetation within the IWWH must be removed using hand cutting or "reach-in" techniques and appropriate techniques to minimize disturbance to the maximum extent practicable, such as the use of travel lanes to accommodate mechanical equipment use in the IWWH must be used. No clearing within the IWWH habitat must occur within the peak waterfowl and wading bird nesting season (April 15th to July 15th) unless approved by the department in consultation with MDIFW.

E. Within an IWWH, impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

F. The permittee must have a third-party inspector provide oversight to the clearing of IWWH areas during construction.

G. No accumulation of slash shall be left within fifty (50) feet, horizontal distance, of the edge of the habitat. In all other areas slash must either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than eighteen (18) inches above the ground. Any debris that falls into the habitat shall be removed.

H. Where overhead transmission lines cross an IWWH area, the permittee must install bird diverters or aviation marker balls according to manufacturer's guidelines and applicable transmission line codes unless otherwise determined to be impracticable by the department in consultation with MDIFW. If aviation markers are used, colors must alternate between yellow/white (for dark and cloudy conditions) and red (for bright and sunny conditions). The use of other methods may be considered in consultation with MDIFW.

I. Prior to initial clearing, heron colonies must be surveyed for and avoided to the maximum extent practicable. Mitigation measures such as artificial nest platforms with predator guards must be considered in consultation with MDIFW in areas adjacent to a disturbed heronry.

J. Provided they do not present a safety hazard and are naturally present, the permittee must leave undisturbed a minimum of 2-3 snags per acre to provide nesting habitat for waterfowl. Where appropriate to mitigate habitat impacts due to the development, and as approved by the department, capable species must be topped, girdled and/or treated with herbicides to prevent re-growth to create snags. Snags must be 12-16 inch in diameter or the largest size available from the existing stand of vegetation.

6. Deer Wintering Areas (DWA)

A. The DWA vegetation management minimum performance standards apply to deer wintering areas as defined in Chapter 375, § 15 that are located wholly or in part within the utility transmission line corridor unless the department determines that functions and values of the DWA will not be impacted by the removal of vegetation.

B. GIS data in concert with the State's database must be used to site projects to avoid deer wintering areas to the maximum extent practicable.

C. The utility corridor must be sited in a manner that avoids and minimizes fragmentation of the habitat area to the maximum extent practicable. If impacts are necessary within a DWA, the development must be sited as close as practicable to the outside edge of the DWA in a location that minimizes fragmentation of the habitat area to the maximum extent practicable.

D. All identified DWAs must be flagged in the field prior to initial line clearing and flagged or located with GPS prior to any maintenance operations.

E. Within a DWA impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

7. Rare and Exemplary Natural Communities and Ecosystems (Rare Community)

A. The Rare Community vegetation management minimum performance standards apply to rare natural communities and ecosystems (State rarity rank of S1 through S3) as listed in Maine's biological conservation data system as managed by the Maine Natural Areas Program.

B. A landscape analysis, approved by the Department in consultation with MNAP, shall be performed to identify portions of the new and expanded areas of the development that must be surveyed for rare plants, communities and ecosystems.

C. All new and expanded areas of the development must be sited in a manner that avoids and minimizes impacts to the rare community to the maximum extent practicable, including avoiding fragmentation of rare community habitats, except as approved by the Department.

D. All identified rare communities must be flagged in the field prior to initial line clearing and flagged or located with GPS prior to any maintenance operations.

E. Initial clearing and maintenance within a rare community must be undertaken during frozen ground conditions whenever practicable, and if not practicable. If not practicable, appropriate techniques to minimize disturbance to the rare community to the maximum extent practicable must be used.

F. Heavy equipment travel within the rare community must be minimized to the maximum extent practicable. Hand cutting or "reach-in" techniques to cut and remove trees or other techniques as agreed upon in consultation with the department and Maine Natural Areas Program (MNAP) must be used. When equipment access is necessary, activity must be restricted to a few narrow travel lanes that have been clearly marked prior to clearing activity.

G. During construction, the third-party inspector must provide oversight to the clearing of capable species within rare community areas.

H. If initial clearing or other construction activities result in areas of bare soil or minimally vegetated cover, where practicable, these areas must be allowed to re-vegetate naturally. If areas are sufficiently large to warrant planting, a native seed mix designed to provide short term cover must be applied, and the area must be allowed to return to native woody and perennial herbaceous vegetation naturally.

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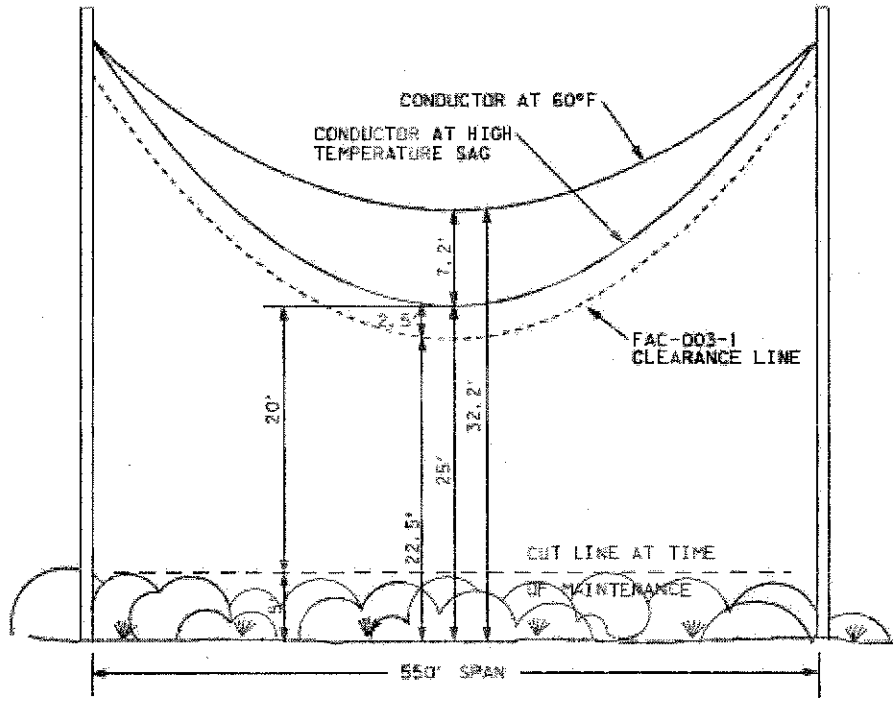
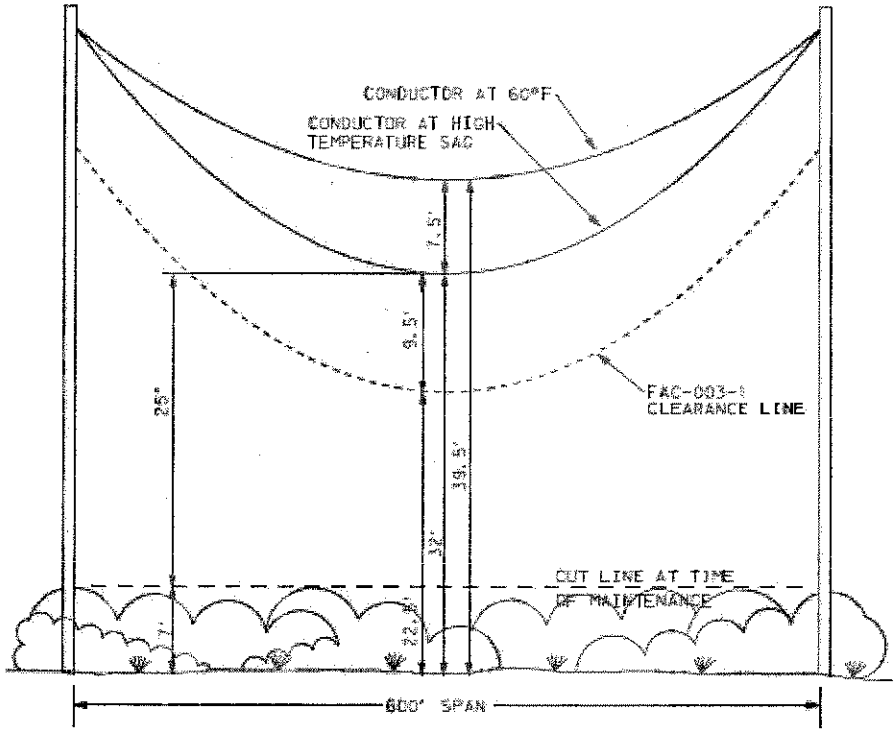
FIGURE 1A



115KV TYPICAL SAG ON NEW CONSTRUCTION

ASSUMPTIONS
1113Kcmil Bluejoy ACSR
8,000# tension @ NESC Heavy
60° Sag @ Initial
High Temp Sag @ 248°F final

Figure 1B



345KV TYPICAL SAG ON NEW CONSTRUCTION

ASSUMPTIONS
1590Kcmil Falcon ACSR
14,000# tension @ NESC Heavy
60° Sag @ Initial
High Temp Sag @ 248°F final

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TABLE 1, A Partial List of Non-Capable Woody Species

Large	
Alternate-leaf dogwood	Cornus alternifolia
American hazelnut	Corylus americana
Azaleas	Rhododendron spp.
Beaked hazelnut	Corylus cornuta
Common elderberry	Sambucus canadensis
Highbush blueberry	Vaccinium corymbosum
Maleberry	Lyonia ligustrina
Mountain-holly	Nemopanthus mucronata
Northern arrowwood	Viburnum dentatum
Chokecherry	Prunus virginiana
Shadbush	Amelanchier spp.
Speckled alder	Alnus serrulata
Willow (various species)	Salix spp.
Winterberry (Black alder)	Ilex verticillata
Witch hazel	Hamamelis virginiana

Medium	
Azaleas	Rhododendron spp.
Black chokeberry	Aronia melanocarpa
Blackberries	Rubus supp.
Broad-leaved Meadowsweet	Spirea latifolia
Buttonbush	Cephalantus occidentalis
Common juniper	Juniperus communis
Hobblebush	Viburnum alnifolium
Leatherwood	Dirca palustris
Northern bayberry	Myrica pensylvanica
Raspberries.	Rubus supp
Red chokeberry	Aronia arbutifolia
Red osier dogwood	Cornus stolonifera
Red-berried elder	Sambucus pubens
Rhodora	Rhododendron canadense
Roses	Rosa supp.
Silky dogwood	Cornus amomum
Steeplebush	Spirea tomentosa
Virginia rose	Rosa virginiana
Willow (various species).	Salix spp
Withrod	Viburnum cassinoides

Small	
Bog rosemary	Andromeda glaucophylla
Bush honeysuckle	Diervilla lonicera
Canada yew (Ground hemlock)	Taxus canadensis
Huckleberry	Gaylussacia baccata
Labrador tea	Ledum groenlandicum
Leatherleaf	Chamaedaphne calyculata
Lowbush blueberry	Vaccinium angustifolium, V. pallidum, V. myrtilloides
Rose (various species)	Rosa spp.
Sheep laurel	Kalmia angustifolia
Sweetfern	Comptonia peregrina
Sweetgale	Myrica gale

Department of Environmental Protection

SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. **This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.**
2. **The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.**
3. **The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.**
4. **Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.**
5. **Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.**
6. **If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.**
7. **If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.**
8. **A copy of this approval must be included in or attached to all contract bid specifications for the development.**
9. **Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.**

(2/81)/Revised November 1, 1979

DEPLW 0429

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NATURAL RESOURCE PROTECTION ACT (NRPA)
STANDARD CONDITIONS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

A. **Approval of Variations From Plans.** The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

B. **Compliance With All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. **Erosion Control.** The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.

D. **Compliance With Conditions.** Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.

E. **Initiation of Activity Within Two Years.** If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years form the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.

F. **Reexamination After Five Years.** If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.

G. **No Construction Equipment Below High Water.** No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.

H. **Permit Included In Contract Bids.** A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.

I. **Permit Shown To Contractor.** Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER MANAGEMENT LAW STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

(1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S.A. § 420-D(8) and is subject to penAlt.ies under 38 M.R.S.A. § 349.

(2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

(3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

(4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.

(5) Initiation of project within two years. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference.

(6) Reexamination after five years. If the project is not completed within five years from the date of the granting of approval, the department may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances or requirements which may have occurred during the five-year period.

(7) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the

conditions by the developer, and the owner and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

(8) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the department.

(9) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.

(a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
(b) All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.
(c) The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained

November 16, 2005

Special Condition
for
Third Party Inspection Program

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,

2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and

3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency except that the MDEP may accept subcontractors who worked for the project's primary consultant on some aspect of the project such as, but not limited to, completing wetland delineations, identifying significant wildlife habitats, or conducting geotechnical investigations, but who were not directly employed by the applicant, as Third Party inspectors on a case by case basis. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land and Water Quality or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following minimum qualifications:

1) a degree in an environmental science or civil engineering, or other demonstrated expertise,

2) a practical knowledge of erosion control practices and stormwater hydrology,

3) experience in management or supervision on large construction projects,

4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,

5) the ability to clearly document activities being inspected,

6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and

7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.

2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.

3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.

4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.

5) During construction, the inspector will monitor the contractor's construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.

6) During construction, the inspector will monitor the contractor's installation of any stream or wetland crossings.

7) During construction, the inspector will monitor the contractor's final stabilization of the project site.

8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor's activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.

9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas under construction. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph. *Note: the frequency of these inspections as contained in this condition may be varied to best address particular project needs.*

10) During construction, the inspector will prepare and submit weekly *(or other frequency)* inspection reports to the MDEP.

11) During construction, the inspector will notify the designated person at the MDEP immediately of any sediment-laden discharges to a protected natural resource or other significant issues such as the improper construction of a stormwater control structure or the use of construction plans not approved by the MDEP.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports *(or at another designated frequency)*, including photographs of areas that are under construction, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday *(or other designated day)* following the inspection week (Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).

2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.

3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.

4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.

5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).

6) For each area open to construction, the report will list the date of initial soil disturbance for the area.

7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area -- e.g. "grubbing in progress", " grubbing complete", "rough grading in progress", "rough grading complete", "finish grading in progress", "finish grading complete", "permanent seeding completed", "area fully stable and temporary erosion controls removed", etc.

8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.

9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.

Third Party Inspection Form

This report is prepared by a Third Party Inspector to meet the requirements of the Third Party Inspector Condition attached as a Special Condition to the Department Order that was issued for the project identified below. The information in this report/form is not intended to serve as a determination of whether the project is in compliance with the Department permit or other applicable Department laws and rules. Only Department staff may make that determination.

TO: *PM, Maine DEP (@maine.gov)*	FROM:
PROJECT NAME/ LOCATION:	DEP #:
DATE OF INSPECTION:	DATE OF REPORT:
WEATHER:	CONDITIONS:

SITE CHARACTERISTICS:

# ACRES OPEN:	# ACRES ACTIVE:	# ACRES INACTIVE:
LOCATION OF OPEN LAND:	LOCATION OF ACTIVE LAND:	LOCATION OF INACTIVE LAND:
OPEN SINCE:	OPEN SINCE:	OPEN SINCE:

PROGRESS OF WORK:

INSPECTION OF:	**Satisfactory**	**Minor Deviation** (corrective action required)	**Unsatisfactory** (include photos)
STORMWATER CONTROL (VEGETATIVE & STRUCTURAL BMP'S)			
EROSION & SEDIMENTATION CONTROL (TEMPORARY & PERMANENT BMP'S)			
OTHER: (PERMIT CONDITIONS, ENGINEERING DESIGN, ETC.)			

COMMENTS/CORRECTIVE ACTIONS TAKEN (attach additional sheets as necessary):

Photos (must be labeled with date, photographer and location):

Cc:		
Original and all copies were sent by email only.		