DEPARTMENT OF THE ARMY PERMIT

Permittee Central Maine Power Company, 83 Edison Drive, Augusta, Maine 04330
Permit No. NAE-2008-03017
Issuing Office New England District
NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.
You are authorized to perform work in accordance with the terms and conditions specified below.
Project Description:
Discharge temporary and permanent fill in numerous inland waterways and adjacent freshwater wetlands in order to upgrade approximately 350 miles of existing electrical transmission corridor and construct an additional 6.4 miles of new corridor as well as to construct or expand 13 electrical substations. The project will result in approximately 13.6 acres of permanent wetland impact; 119 acres of temporary impact; 1,285 linear feet of a stream impact; and 345 acres of forested wetland cover type conversion.
This work is shown on the attached plans entitled "In accordance with the attached plans & tables entitled "MAINE POWER RELIABILITY PROGRAM" in 13 sheets undated and with the construction plans submitted with application and otherwise amended.
Project Location:
The project extends from Eliot to Orrington, Maine.
Permit Conditions:
General Conditions:
1. The time limit for completing the work authorized ends on If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordina-

of Historic Places.

tion required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and subcontracts for work which affects areas of Corps of Engineers jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for work.

(Special Conditions continued on Page 4)

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - X Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - X Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 141s).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes,
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation

referenced enforcement procedures provide for the issuance o and conditions of your permit and for the initiation of lega corrective measures ordered by this office, and if you fail to	edures such as those contained in 33 CFR 326.4 and 326.5. The f an administrative order requiring you to comply with the terms a action where appropriate. You will be required to pay for any comply with such directive, this office may in certain situations corrective measures by contract or otherwise and bill you for the
	or the completion of the activity authorized by this permit. Unless of the authorized activity or a reevaluation of the public interest o a request for an extension of this time limit.
Your signature below, as permittee, indicates that you accept as (PERMITTEE)	nd agree to comply with the terms and conditions of this permit. 7/21/20/0 (DATE)
This permit becomes effective when the Federal official, design	ated to act for the Secretary of the Army, has signed below. 7-2+2010. (DATE)
DISTRICT ENGINEER	(DATE)
Philip T. Feir	
Colonel, Corps of Engineers	
conditions of this permit will continue to be binding on the new	in existence at the time the property is transferred, the terms and w owner(s) of the property. To validate the transfer of this permit s terms and conditions, have the transferee sign and date below.
(TRANSFEREE)	(DATE)

Special Conditions Continued from Page 2

If the permit is issued after the construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract as a change order. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

- 2. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
- 3. The permittee shall implement all terms and conditions contained in the attached water quality certification from the Maine Dept. of Environmental Protection dated "April 5, 2010". Copies of all required submittals shall also be provided to the Corps.
- 4. No temporary fill (e.g., access roads, cofferdams) may be placed in waters or wetlands unless specifically authorized by this permit. If temporary fill is used, it shall be disposed of at an upland site and suitably contained to prevent its subsequent erosion into a water of the U.S., and the area shall be restored to its original contours (but not higher) and character upon completion of the project. During use, such temporary fill must be stabilized to prevent erosion or, in the case of flowing water (rivers or streams), clean washed stone should be used.
- 5. The permittee shall complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.
- 6. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2008-03017" and shall be addressed to "Inspection Section, CENAE-R. U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751." Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. Copies of Construction Monitoring Reports submitted by third party inspectors in compliance with state permit requirements may be provided electronically to the Corps project manager at: jay.l.clement@usace.army.mil
- 7. Navigable waters in the State of Maine include any water subject to the ebb and flow of the tide, the Penobscot River to Medway, the Kennebec River to Moosehead Lake, and the portion of Lake Umbagog located in Maine. For any segment of the project that crosses a navigable waterway, the minimum sag height of any transmission cable above the mean high water line or ordinary high water line of the waterway shall be no lower than 30' above the clearance of the fixed bridge(s) in the vicinity of the crossing site.

Special Conditions Continued from Page 4

- 8. In order to fulfill the requirements of Section 106 of the National Historic Preservation Act of 1966, the permittee shall implement the stipulations contained in the attached Memorandum of Agreement dated "April 1, 2010".
- 9. Any permanent or temporary stream crossing utilizing a culvert shall be constructed with the bottom of the culvert embedded a minimum of six inches into the soil and a culvert diameter equal to 1.2 times the stream bank width.
- 10. Mitigation shall consist of 13 preservation/enhancement sites totaling approximately 3,342 acres, and 1,800 linear feet of stream restoration to Rounaround Brook and Day Brook, and 2,100 linear feet of potential enhancement at Montsweag Brook. In addition, an in-lieu-fee ("ILF") contribution of \$1,563,538 shall be made to the Maine Natural Resources Conservation Program. This work shall be performed in accordance with the attached mitigation plan entitled, "13.0 COMPENSATION PLAN, NATURAL RESOURCES PROTECTION ACT APPLICATION" and dated "April 2010."
- 11. In accordance with the attached mitigation plan and state permit/water quality certification, the ILF contribution shall consist of a cashier's check or bank draft, made out to "Treasurer, State of Maine", with the DEP and Corps permit numbers noted on the check. The check and an ILF Project Data Worksheet should be mailed to: Maine DEP, Attn: ILF Program Administrator, State House Station 17, Augusta, ME 04333. **This authorization is not valid until** the permittee provides the Corps with a copy of the check, with the permit number noted on the check. The ILF amount is only valid for a period of one year from the date on the authorization letter. After that time, the project would need to be reevaluated and a new amount determined.
- 12. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 10 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps of Engineers. The term "mitigation success" means success as defined in the mitigation plan this permit requires you to implement. Demonstration of success under this permit shall consist of the required mitigation monitoring, corrective measures, submittal of mitigation monitoring reports, and a final wetland assessment.

Permit Conditions Continued on Page 6

Permit Conditions Continued from Page 5

Corps of Engineers Permit No. NAE-2008-03017
Permit Special Conditions Resulting From
Informal Endangered Species Act Consultation
With US Fish & Wildlife Service
References: USFWS Biological Opinion ("BO") dated "July 18, 2010"; and
Corps/TRC Biological Assessment ("BA") dated "June 7, 2010"

- 1. Prior to construction of the transmission line, all riparian buffers adjacent to streams identified as having "restricted access" in the waterbody crossing table in Appendix A of the BA shall be flagged with distinctive flagging or other signage in order to avoid inadvertent and unintentional direct or indirect impacts to Atlantic salmon or its critical habitat.
- 2. <u>No instream work is authorized</u> in the streams identified as having "restricted access" on the attached waterbody crossing table in Appendix A of the BA.
- 3. Any span structures on streams identified as having "restricted access" shall be installed and maintained to prevent soil and other material from washing into the stream. This shall include cleaning the travel surface of the span to prevent accumulated material from washing into the stream. At each of these crossings, clearing of non-capable woody vegetation shall be minimized to the maximum extent practicable and the roots allowed to remain in order to reduce indirect impacts and to promote natural re-vegetation.
- 4. All areas of wetlands which are disturbed during construction shall be restored to their approximate original elevation (but not higher) and condition by careful protection, and/or removal and replacement, of existing soil and vegetation. In addition, if upland clearing, grubbing, or other construction activity results in, or may result in, soil erosion with transport and deposition into wetlands or waterways, devices such as geotextile silt fences, sediment trenches, etc., shall be installed and properly maintained to minimize such impacts during construction. These devices, with the exception of erosion control mix, must be removed upon completion of work but not before stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to waterway or wetland.
- 5. No temporary fill (e.g., access roads, cofferdams) may be placed in waters or wetlands unless specifically authorized by this permit. If temporary fill is used, it shall be disposed of at an upland site and suitably contained to prevent its subsequent erosion into a water of the U.S., and the area shall be restored to its original contours (but not higher) and character upon completion of the project. During use, such temporary fill must be stabilized to prevent erosion or, in the case of flowing water (rivers or streams), clean washed stone should be used.
- 6. All construction areas shall be open for inspection by the permitting agency(ies) as well as federal resource agency personnel during working hours.

Permit Conditions Continued on Page 7

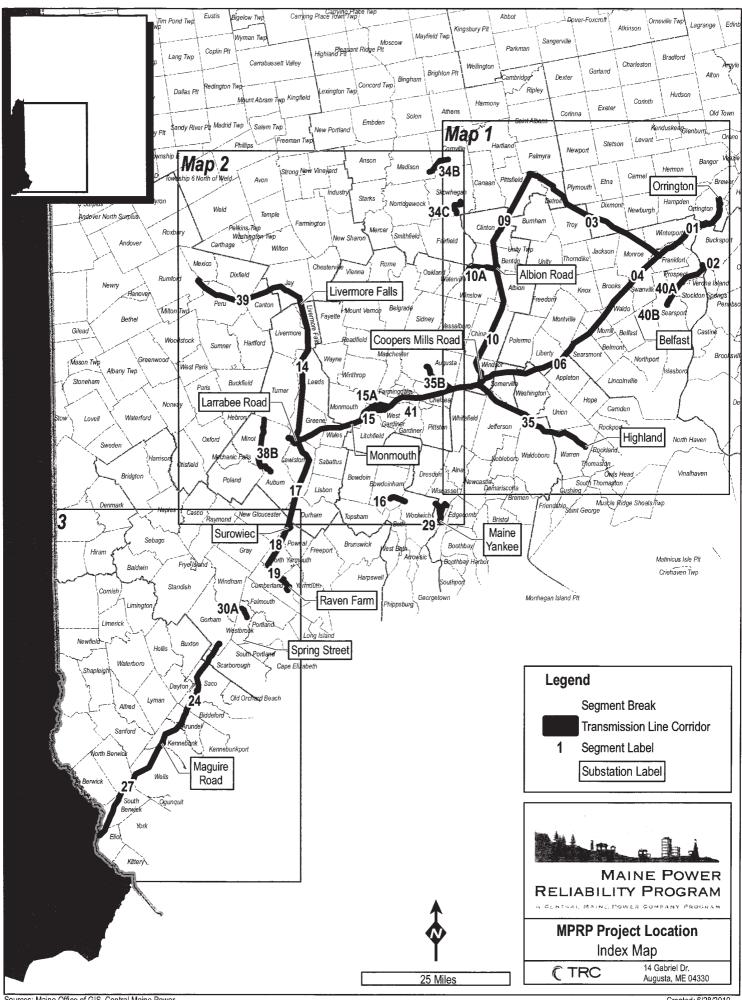
Permit Conditions Continued from Page 6

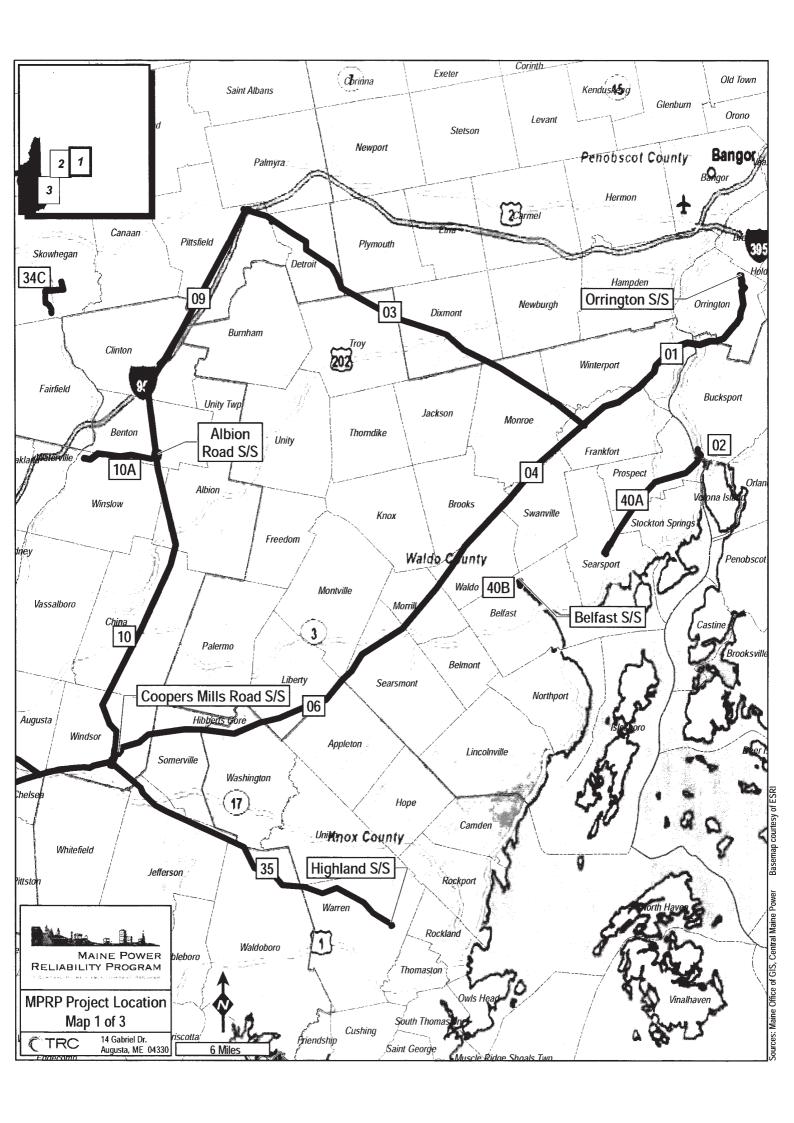
- 7. The permittee shall implement all terms and conditions contained in the attached water quality certification from the Maine Dept. of Environmental Protection dated "April 5, 2010" and subsequent revisions. Copies of all required submittals shall also be provided to the Corps.
- 8. The permittee shall take all reasonable and prudent measures to minimize the risk of accidental spills of petroleum or other hazardous contaminants from construction equipment at waterway and wetland crossings. Minimum specific spill management measures are contained in the document entitled "Vegetation Management Practices: Maine Power Reliability Program" last revised "March 31, 2010" which is contained in the administrative record.
- 9. The permittee shall conduct all clearing operations, during both construction and long-term right-of-way maintenance, in accordance with the document contained in the administrative record entitled "Vegetation Management Practices: Maine Power Reliability Program" last revised "March 31, 2010".
- 10. In accordance with the document entitled "Vegetation Management Practices: Maine Power Reliability Program" last revised "March 31, 2010", application of herbicides within 25' of any waterbody is prohibited.
- 11. Prior to the start of construction, the permittee shall conduct environmental training for all contractors, sub-contractors, and inspectors. Federal and state resource and regulatory staff shall be invited to attend and/or assist in the presentations. At a minimum, this training shall include actions to be taken to avoid and minimize direct and indirect impacts to aquatic resources such as wetlands, streams, Atlantic salmon streams, and vernal pools.
- 12. The permittee shall take all reasonable and prudent measures to discourage post-construction recreational ATV use and destruction in sensitive aquatic habitats to include vernal pools, streams, and Atlantic salmon streams. The permittee shall be allowed to make periodic crossings of streams with ATVs for routine inspection and vegetation maintenance purposes. All efforts will be made to keep such stream crossings to the minimum necessary. ATV use may not cause any adverse effects to Atlantic salmon or their critical habitat or result in take of Atlantic salmon.
- 13. The following conditions are intended to minimize the risk of potential impacts to bald eagles during MPRP construction and maintenance activities.
- a. Marker balls. At locations shown on the table on Pages 47-48 of the attached permit from the Maine DEP, the permittee shall install aviation marker balls or other industry-standard line collision deterrents to reduce the potential for eagle and other large bird strikes/entanglements with the existing/proposed transmission lines.
- b. Clearing restrictions. In accordance with the table on Page 48 of the attached permit from the Maine DEP, the permittee shall avoid/minimize to the maximum extent practicable over story clearing proximate to four specific eagle nest sites or foraging perches located in close proximity to the existing transmission line right-of-way.

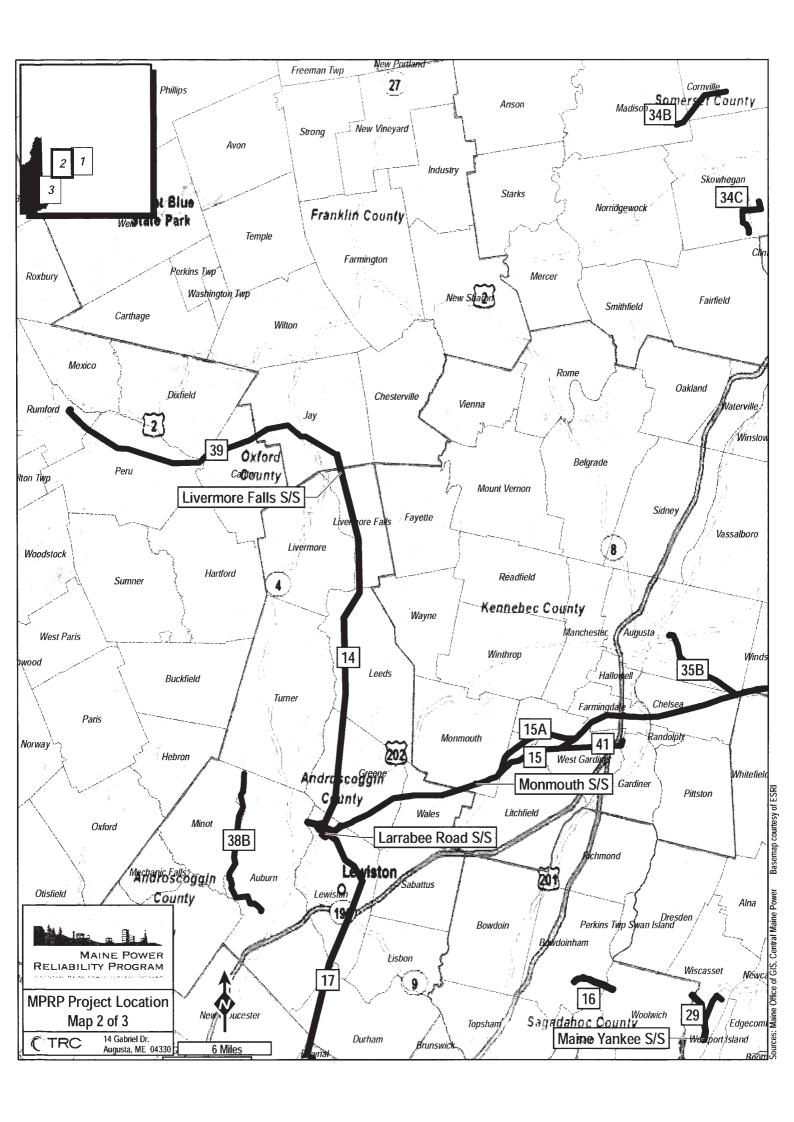
Permit Conditions Continued on Page 8

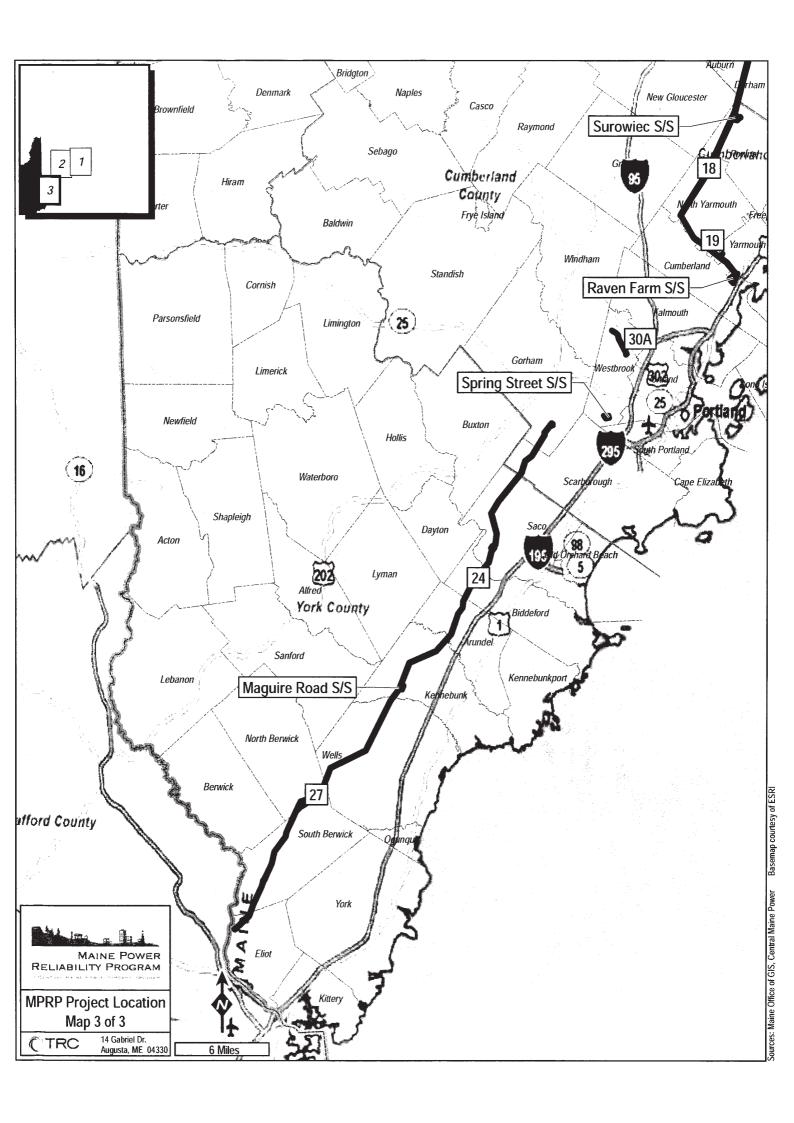
Permit Conditions Continued from Page 7

- c. Time of year restriction. In accordance with the table on Page 49 of the attached permit from the Maine DEP, the permittee shall avoid clearing and construction operations within ¼ mile of identified eagle nests during breeding season, March 1 to Augusta 31, of each year. Should clearing and construction activities during the breeding season be unavoidable at these locations, they may only be authorized if the permittee resurveys for nesting eagles, determines they are not present, and Maine IF&W and USFWS concur.
- d. Resurvey. For any of the segment(s) shown on the table on Page 49 of the attached permit from the DEP that is scheduled for construction in a given year, the permittee shall resurvey the segment(s) during the IF&W prescribed spring nesting survey period, generally April, in order to verify the existence of and nesting activity within known eagle nests and to identify the location of any new nests. For any new nests identified, the same protective measures noted above shall also apply.
- 14. In order to minimize the risk of potential impact to New England cottontails during MPRP construction and maintenance activities, the permittee shall comply with measures specified in the attached document entitled "Maine Power Reliability Program (MPRP), Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" dated "April 6, 2010".



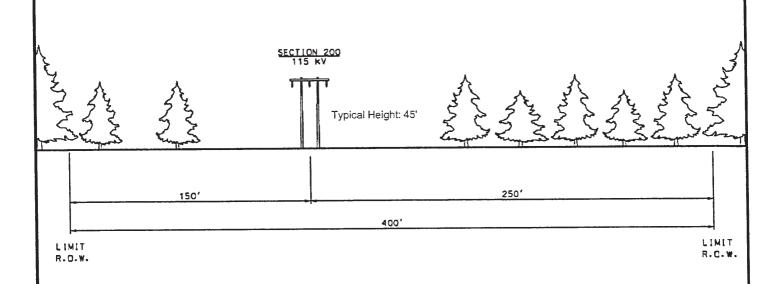




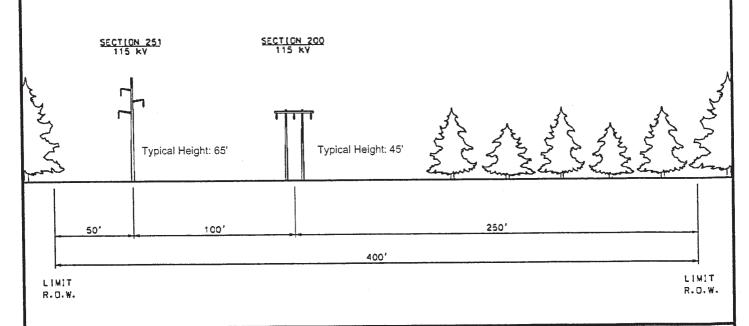


Typical Cross Section 1

EXISTING



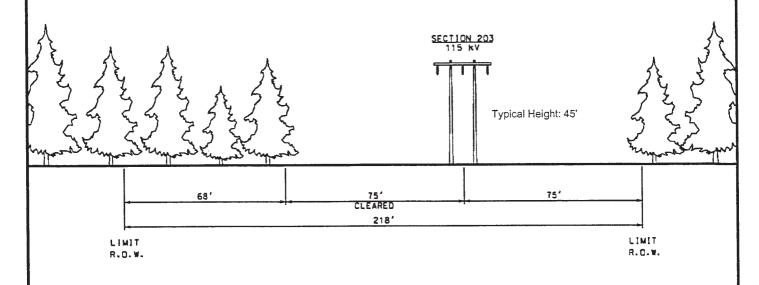
<u>PROPOSED</u>



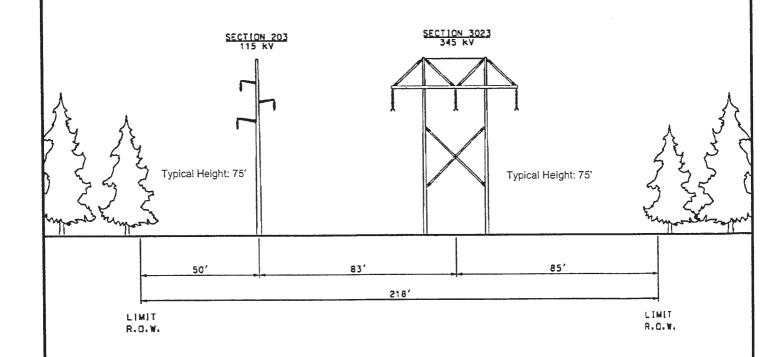
MPRP activities include: The addition of a 115 kV transmission line within the existing CMP-owned right-of-way that currently contains a 115 kV line.

Typical Cross Section 2

EXISTING



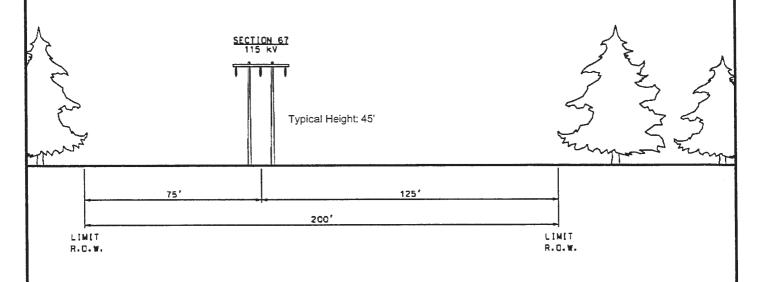
PROPOSED



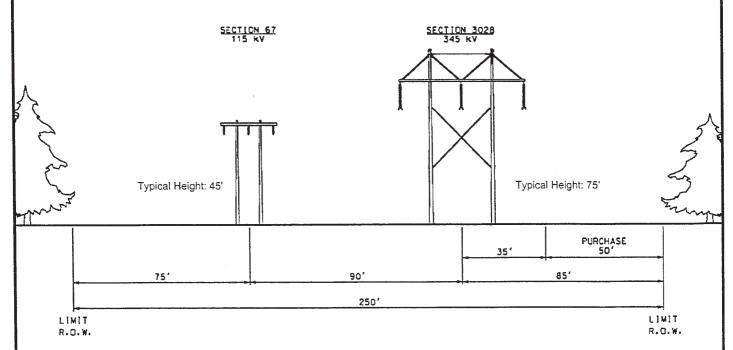
MPRP activities include: The Rebuilding and relocation of an existing 115 kV transmission line and the addition of a new 345 kV transmission line within the CMP-owned right-of-way.

Typical Cross Section 3

EXISTING

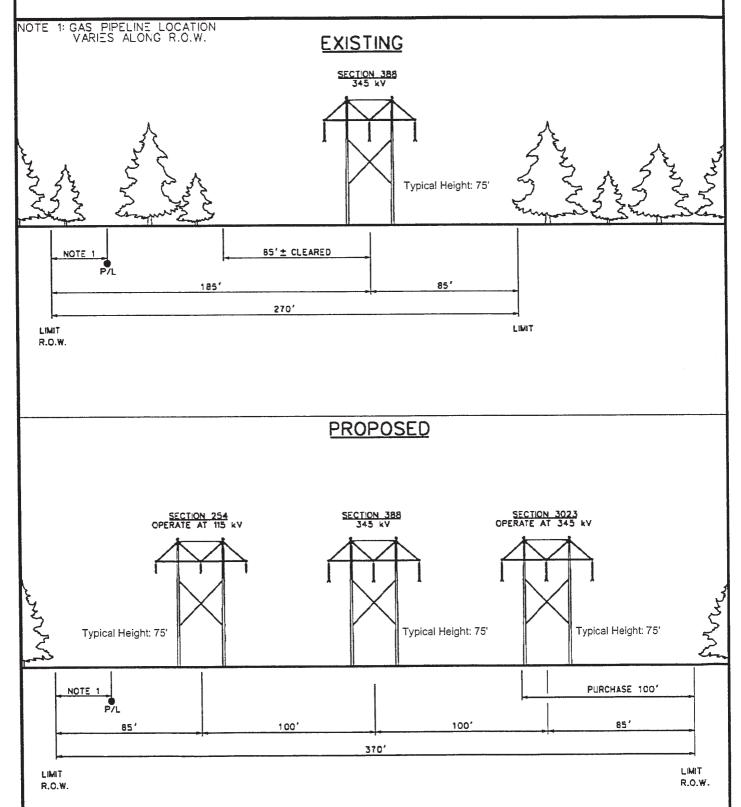


PROPOSED



MPRP activities include: The widening of the existing transmission line right-of-way and the addition of a new 345 kV transmission line.

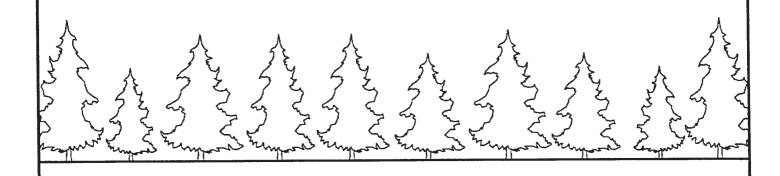
Typical Cross Section 4

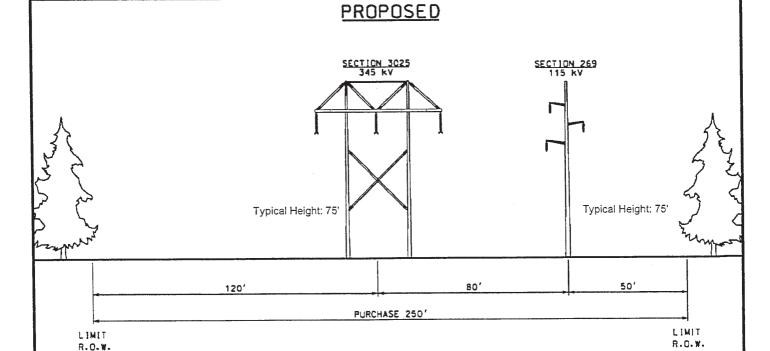


MPRP activities include: The widening of the existing transmission line right-ofway and addition of two new 345 kV transmission lines.

Typical Cross Section 5

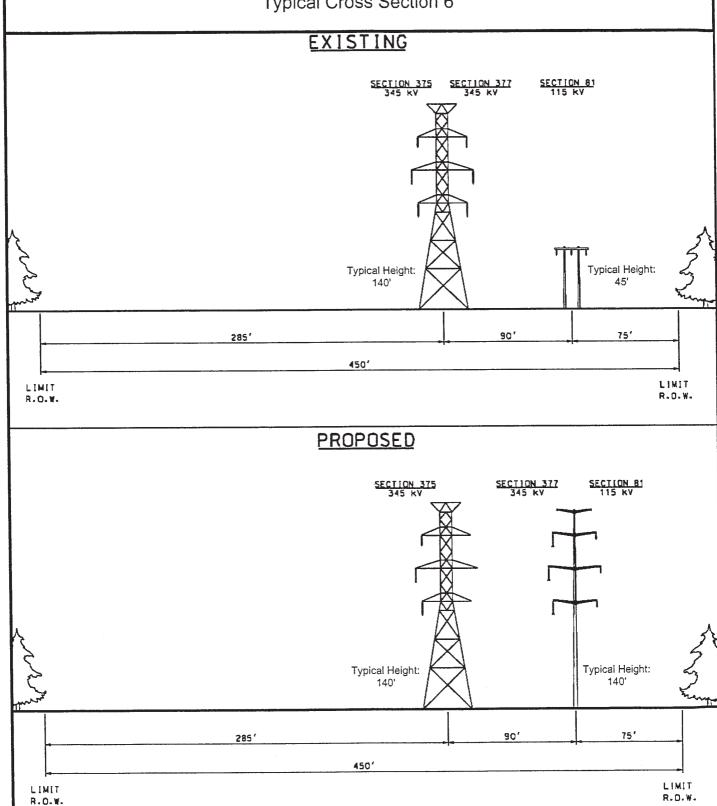
EXISTING





A very small portion of the Maine Power Reliability Program (6.4 miles) will consist of the development of a new 250-foot wide transmission line corridor that will contain a 345 kV and a 115 kV transmission line as depicted in the schematic diagrams above.

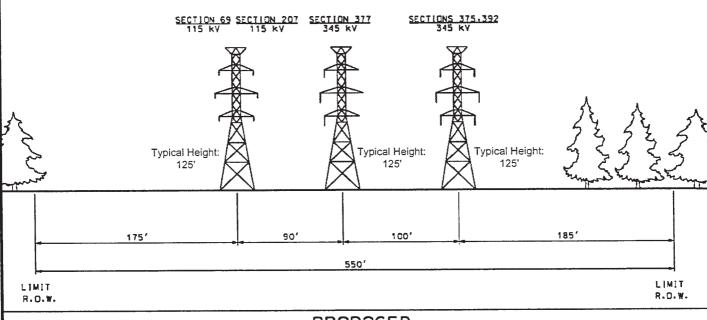
Typical Cross Section 6



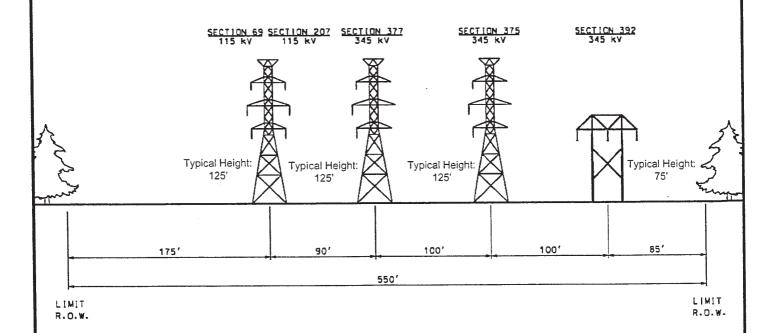
MPRP activities include: Moving an existing double-circuited transmission line on to a rebuilt 115/345 kV double-circuited structure within the CMP-owned right-of-way.

Typical Cross Section 7

EXISTING



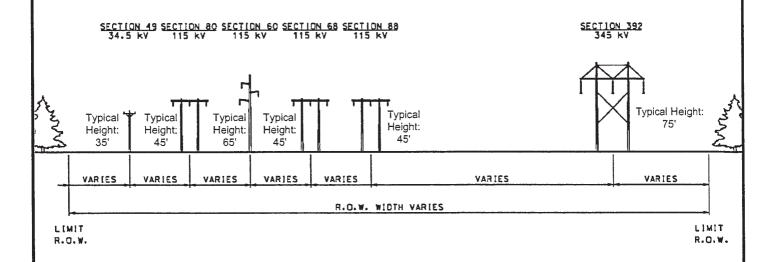
PROPOSED



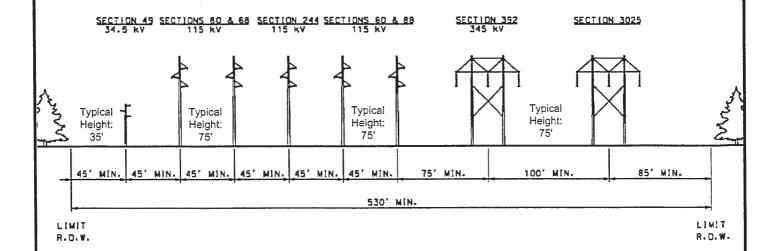
MPRP activities include: The widening of the existing CMP-owned right-of-way and moving an existing double-circuited 345 kV transmission line on to a new 345 kV structure.

Typical Cross Section 8

EXISTING



PROPOSED



MPRP activities include: The rebuilding of several 115 kV transmission lines and the addition of a new 115 kV transmission line and a new 345 kV transmission line.

MPKP Project Impacts and Compensation

	Impacts				
1	Activity	Impact Extent		Compensation Provided	
	Temporary (<18 mo) fill in non-forested wetlands from construction access roads:	100 +/- ac.			
Temporary Wetland Fill From	Temporary (<18 mo) fill in forested wetlands from construction access roads:	9.5 +/- ac.			
Construction Access Roads: (includes temporary timber mats and granular fill)	Temporary (>18 mo) fill in non-forested wetlands from construction access roads:	7.0 +/- ac.	420 +/- ac. Pre	420 +/- ac. Preservation of Wetlands and Upland Buffers	
	Temporary (>18 mo) fill in forested wetlands from construction access roads:	2.5 +/- ac.			
	Total	119 ac.			
Permanent Cover Type Conversion of Forested Wetlands t due to clearing for transmission line corridor construction	Permanent Cover Type Conversion of Forested Wetlands to Scrub/Shrub due to clearing for transmission line corridor construction	345 +/- ac.	2,009 +t- ac. Pr	2,009 +1- ac. Preservation of Wetlands and Upland Buffers	
Permanent Cover Type Conversion in Vern for transmission line corridor construction	Permanent Cover Type Conversion in Vernal Pool Habitats due to clearing for transmission line corridor construction	78.3 + /- ac.	723 +	723 +/- ac. SVP Habitat Preservation	
Permanent Cover Type Conversion in Potentially Significant Vernal Habitats due to clearing for transmission line corridor construction	Permanent Cover Type Conversion in Potentially Significant Vernal Pool Habitats due to clearing for transmission line corridor construction	10.8 +/- ac.	+ 96	98 +/- ac. SVP Habitat Preservation	
Permanent Fill in Vernal Pool Habitat due to substation construction (no fill in vernal pool depression area)	at due to substation construction	1.0 +/- ac.	₹ 8'6	9.8 +/- ac. SVP Habitat Enhancement	
Permanent Wetland Fill Impacts du pole/anchor installation	Permanent Wetland Fill Impacts due to substation construction and new pole/anchor installation	13.6 +/- ac. (0.8 ac from Transmission Poles + 12.8 ac from Substations)	13 +/- ac. Wetland Enhancement/Restoration (to offset 3.0 ac. of permanent wetland fill)	57 +/- ac. Wetland/Upland Preservation (to offset 2.4 ac. of permanent wetland fill)	\$1,563,538 payment to ILF (to offset 8.2 ac. of permanent wetland fill)
Stream Impacts due to substation construction (Relocation)	onstruction	1285 +/- Linear Feet	Up to 3,900 linear feet of stre	Up to 3,900 linear feet of stream restoration (at least 1,800 feet of stream restoration)	toration)

1. USACE Standard Ratios: 1:1 for stream restoration, 15:1 for wetland/upland preservation, 3:1 for restorationhenhancement - also utilizing the document CMP Mitigation Cuidance: Adjustments to standard ratios/amounts for temporary & indirect impacts activities 2. MDEP Standard Ratios: 1:1 for steram restoration, 1:1 for restorationhenhancement - also utilizing the document CMP Mitigation Cuidance: Adjustments to standard ratios/amounts for temporary & indirect impacts activities 3. Area within 250 feet of Significant Vernal Pools under USACE jurisdiction, and Significant Manmade Vernal Pools under USACE jurisdiction in the Kennebec Gorge 4. Compensation provided also includes approximately 1,356 acres of preservation in the Kennebec Gorge



A CENTHAL MAINE POWER COMPANY PRODERM **MPRP Project Location**

14 Gabriel Dr. Augusta, ME 04330

CTRC

DEPARTMENT OF THE ARMY PERMIT EVALUATION AND DECISION DOCUMENT New England District

APPLICANT: Central Maine Power Company **APPLICATION NO.:** NAE-2008-03017

WATERWAY: Multiple from Eliot to Orrington, Maine

This document constitutes the Environmental Assessment, Statement of Findings, and review and compliance determination according to the 404(b)(1) Guidelines for the proposed work (applicant's preferred alternative) described in the attached public notice.

r.v	Authority
	This permit action is being taken under authority delegated to the District Engineer by 33 CFR 325.8,
	pursuant to:
	X Section 10 of the Rivers and Harbors Act of 1899 (Public interest review factors only)
	X Section 404 of the Clean Water Act (Public interest review and 404(b)(1) factors)
	Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972

2.0 Proposed Project

2.1 Project Description: Central Maine Power Company ("CMP"), proposes to place permanent and temporary fill in numerous waterways and wetlands in Penobscot, Hancock, Waldo, Somerset, Knox, Franklin, Kennebec, Oxford, Lincoln, Sagadahoc, Androscoggin, Cumberland, and York Counties as part of its Maine Power Reliability Program ("MPRP"). The project will affect 78 municipalities. The MPRP project consists of building, re-building, re-rating, or removing 115 kilovolt ("kV"), 345 kV, and 34.5 kV electric transmission lines within, or immediately adjacent to, approximately 350 miles of existing CMP transmission line corridor, along multiple segments extending from Eliot to Orrington, Maine. Of this amount, approximately 6.4 miles (2%) will be moved to a new corridor and is therefore considered new construction. In addition, the applicant will construct, expand, or upgrade 13 electrical substations and remove three existing substations.

The MPRP will result in approximately 13.6 acres of permanent wetland impact, 119 acres of temporary wetland impact, and impacts to approximately 1,285 linear feet of a stream. In addition, tree clearing along CMP's transmission line corridor will affect approximately 345 acres of forested wetland cover type by converting it to scrub-shrub and/or emergent cover types. Clearing of trees in wetlands will not require filling, grading, grubbing, or more than de minimis soil disturbance. All temporary wetland impacts will be restored upon MPRP completion. The applicant prepared a Compensation Plan in consultation with the U.S. Army Corps of Engineers ("Corps") and the Maine Department of Environmental Protection ("MDEP") that describes measures to be implemented to compensate for unavoidable impacts to wetlands and other waterbodies and results in a "no-net-loss" of functions and values. The Compensation Plan is contained in the applicant's Corps application materials and includes restoration, enhancement, preservation, and in-lieu fee compensation components. Its implementation is a condition of the permit.

The purpose of the MPRP is to allow the applicant to make the necessary improvements to its bulk power transmission system to ensure compliance with federally mandated power transmission system standards; to continue to provide safe, cost-effective, and reliable service to its customers; to meet the growing electrical demand of Maine customers; and to meet the reliability standards established by the North American Electric Reliability Corporation ("NERC"), Northeast Power Coordinating Council ("NPCC"), and the Independent System Operator of New England ("ISO-NE").

- **2.2 Location:** The MPRP affects numerous waterways and wetlands from Eliot to Orrington, Maine. Refer to Project Description, Section 2.1.
- **2.3** Scope of Analysis: This evaluation encompasses direct and indirect impacts to aquatic resources affected along the entire 350 miles of transmission corridors and the 13 substation locations associated with this project.

2.4 Purpose and need:

Project need as evaluated by the Corps – The purpose of the MPRP is for the applicant to make the necessary improvements to its bulk power transmission system to ensure compliance with federally mandated power transmission system standards; to continue to provide safe, cost-effective, and reliable service to its customers; to meet the growing electrical demand of Maine customers; and to meet the reliability standards established by the NERC, NPCC, and ISO-NE.

Basic Project purpose – The purpose of the project is to increase the overall reliability of the electrical transmission infrastructure within the identified transmission corridor to meet existing and anticipated demands for electrical power with increased reliability.

Water dependency [40 CFR 230.10(a)(3)] — Temporary or permanent discharges of fill material into waterways and wetlands for the project are associated with temporary access roads or the installation of pole and/or anchor structures and for construction or expansion of electrical substations. These discharges are not water dependent; they do not have to be sited within a water of the U.S. in order to meet the basic project purpose.

Overall project purpose as determined by the Corps – To improve the overall reliability of existing electrical transmission infrastructure within the identified transmission corridor in accordance with national standards and to meet existing and projected electrical demand.

Corps jurisdiction in this case is limited to the discharge of fill material into waters of the United States in the form of access fill (timber mats & fill) and fill for pole/anchor installation. Crossings of navigable waters are subject to Corps jurisdiction under Section 10 of the Rivers & Harbors Act. Clearing of utility corridors that does not result in a discharge is not jurisdictional.

2.5 Site description: An extensive segment by segment description of the MPRP transmission line corridors and 13 electrical substation sites is contained in the administrative record. The proposed MPRP will cross flat to moderate/steep terrain, in 13 counties, 78 municipalities or townships, and numerous waterways

and wetlands in central and southern Maine. The new, rebuilt, and/or re-rated transmission lines will result in new line configurations within CMP's existing transmission line corridor. Approximately 98 percent of the transmission line will be located within, or immediately adjacent to, existing transmission line corridors and two percent of the work will be within new corridor. Expansion (7), upgrade (1) and removal (3) of existing substations will occur within, or near, existing CMP facilities while construction of the five new substations will occur on undeveloped lands in close proximity to existing CMP transmission line corridors. The cover types within and adjacent to the MPRP transmission line corridor and substation sites include upland forested (coniferous, hardwood, and mixed), early-successional (shrub-lands and herbaceous), wetland (palustrine forested, scrub-shrub, and emergent), and developed (residential, commercial, and industrial).

3.0 Alternatives Considered [33 CFR 320.4(b)(4), 40 CFR 230.10, 40 CFR 1502.14]

- 3.1 No action: Under the no action alternative, the necessary improvements to CMP's bulk power transmission system would not be made; Maine's electrical network reliability and electrical transmission capacity would not be improved; and the demonstrated need of the MPRP would not be addressed. The applicant's primary obligation to its customers is to provide safe, reliable, and cost-effective electrical service. The no action alternative would prevent the applicant from meeting its primary obligations and result in reduced electrical service reliability to its customers and other bulk power transmission system users, potentially leading to system failure and large scale blackouts. The No Action alternative does not meet the basic or overall project purpose.
- 3.2 <u>Transmission Alternatives</u>. During the applicant's analysis of potential transmission line route alternatives, a principal consideration in identifying the least environmentally damaging practicable alternative was to use segments located within, or directly adjacent and parallel to, existing CMP electrical transmission line corridors to the maximum extent practicable. Co-location avoids the creation of new greenfield transmission corridor routes and minimizes new potential impacts to vegetation, wetlands, waterways, wildlife habitat, and other natural resources; landscape disturbances; and changes to existing land use patterns. Co-location of electrical transmission lines also enhances opportunities to use existing substations, rather than siting new substations, thereby further reducing overall environmental impacts. By co-locating new electrical transmission lines, a portion of the existing corridor can be used to provide the needed separation distance between transmission lines and a maintained corridor edge. As a result of this, and because of overlaps with existing transmission line corridors, a significantly narrower strip of vegetation alteration will be required than would be required for new greenfield transmission line route(s). The Corps generally maintains that co-location represents the least environmentally damaging practicable alternative. The federal resource agencies concur.

To select the best possible and least environmentally damaging practicable alternative for the MPRP transmission line corridor route, the applicant initially identified and evaluated numerous combinations of 37 potential transmission route segments. Two potential submarine cable segments and an extensive terrestrial greenfield transmission corridor segment were eliminated from further consideration due to complex engineering design, grid connectivity constraints, and impacts on the coastal/marine environments associated with a submarine cable; greater environmental impacts associated with a lengthy greenfield transmission line corridor; and high construction costs. These options are not economically or logistically practicable or less environmentally damaging.

The applicant further identified and evaluated possible combinations of the remaining 34 transmission route segments. The applicant identified Surowiec Substation in the Town of Pownal, Cumberland County, as the location for dividing its service area of need into northern and southern components because that substation is a major transmission hub that serves as the only connection point between the various northern and southern segments. The applicant then identified five possible transmission alternatives in the northern part of its system and five possible transmission alternatives in the southern part of the system, for a total of 10 possible transmission line corridor alternatives. The applicant eliminated 8 of the 10 possible transmission line corridor alternatives from further consideration due to insufficiently meeting electrical need, engineering constraints (e.g., transmission line losses, 115 kV system operability, transfer capability, and system longevity), excessive cost, and environmental constraints (e.g., wetlands, waterways including outstanding river segments, and Atlantic salmon habitat). Based on the results of its evaluation, the applicant selected a viable transmission line network of one northern and one southern alternative, referred to as N5/S1 Elm, which meets critical electrical engineering criteria, is the least environmentally damaging practicable alternative (98 percent of transmission line work will take place within, or immediately adjacent to, existing CMP transmission line corridors and only two percent of the work will be within greenfield corridor), and can be constructed in a efficient and costeffective manner. A detailed description of this analysis and the various segments is contained in the administrative record.

- 3.3 Non-transmission Alternatives ("NTA"s). The applicant completed a comprehensive analysis of NTAs and compared these alternatives to its preferred N5/S1 Elm transmission line corridor to determine if some or all of the MPRP could be avoided. The NTA options that the applicant considered include energy efficiency programs (e.g., conservation), voluntary customer agreement programs to reduce power use during peak demand periods, and new strategically located generating plants. The applicant analyzed four Alternative Resource Configurations ("ARC"s) to address reliability concerns and concluded that, with the exception of an area around the City of South Portland in Cumberland County, called the South Portland Loop, a nontransmission program would not be a practicable alternative for most of the regions in Maine served by the applicant since a transmission program would result in greater reliability and lower electrical rates. In addition, the most effective of the NTAs would have required that a power supplier other than CMP construct and operate approximately 31 new generation facilities throughout Maine that would likely be powered by fossil fuels introducing a suite of environmental impacts including air emissions, and various impacts related to land development, such as increased stormwater run-off, wetland impacts, and increased noise levels at sensitive receptors. However, the applicant determined that power demand management and energy efficiency measures are cost-effective as components of any transmission line alternative, and thus will implement these provisions as part of MPRP. In addition, and pursuant to the Certificate of Public Convenience and Necessity ("CPCN") issued by the Maine Public Utilities Commission ("PUC"), the applicant will study the feasibility of a smart grid/NTA pilot plan in lieu of the transmission solution for Segment 35 of the project. The plan will be reviewed by the PUC to determine its feasibility. The Corps has determined that the applicant has made a reasonable and good faith effort to identify NTAs and notes that energy efficiency programs will continue regardless of the MPRP. NTAs alone do not appear to meet the state-wide purpose and need for the project.
- **3.4** <u>Substation Site Alternatives</u>. The applicant initially identified 22 electrical substation locations along its preferred transmission line corridor route; however, as the MPRP design and system analysis evolved nine substations locations were eliminated from further consideration. The applicant proposes to construct five new substations, expand or upgrade eight substations, and remove three existing substations. The applicant

evaluated many site-specific factors in siting and designing the least environmentally damaging practicable alternative at each substation location including potential environmental impacts, real estate requirements and availability, engineering and outage requirements, proximity to existing facilities, and cost constraints. No alternatives were identified that were available, practicable, and less environmentally damaging. A detailed description of this analysis and the various substation alternatives is contained in the administrative record.

4.0 Mitigation [33 CFR 320.4(r); 40 CFR 230.70-77 and 230.90-99; 40 CFR 1504.12(f)]

4.1 Minimization - The applicant conducted a comprehensive alternatives analysis of numerous combinations of potential transmission line corridors and electrical substation sites to identify the least environmentally damaging practicable alternatives while satisfying critical electrical engineering criteria. The applicant selected a preferred transmission line network corridor (N1/S1 Elm) where 98 percent of the work is co-located with existing CMP transmission line corridors and two percent of the work is within new corridor. The applicant's preferred transmission line network and substation sites make the most effective use of existing electrical transmission line corridors to minimize land disturbance and best incorporates all practicable measures to avoid and minimize environmental impacts while meeting the MPRP purpose.

The applicant will build, rebuild, re-rate, or remove 115 kV, 345 kV, and 34.5 kV electric transmission lines within 350 miles of existing CMP transmission line corridor. Of this amount, approximately 6.4 miles will be new corridor. The applicant is meeting its' minimum allowable setback requirements from existing transmission lines, and other utilities, to maintain public safety and the functional integrity of those utilities while minimizing corridor clearing where practicable. These setback requirements are based in national and state safety standards. New or upgraded substations have been designed to avoid or minimize impacts to aquatic resources to the maximum extent practicable.

In addition, the applicant has incorporated a number of design and construction measures to avoid or minimize impacts to waters of the United States ("U.S"). These include: placement and/or spanning of utility structures to avoid waters of the U.S. and their associated buffers where practicable; minimization of the extent and duration of soil disturbance; implementation of the MPRP erosion control plan and vegetation management practices to minimize erosion and sedimentation and maintain riparian buffers along rivers, streams, or brooks; scheduling construction clearing within riparian buffers and wetlands during frozen ground conditions, whenever practicable; use of equipment mats or bridges to cross unfrozen waterways; and scheduling construction activities to avoid critical spawning/nesting periods for fish and wildlife. These measures are detailed in the applicant's state and federal application materials and reflect the applicant's overall goal of avoiding and minimizing environmental impacts.

The Corps and Federal resource agencies concur that the applicant has satisfied section 230.10(b) of the 404(b)(1) Guidelines and that all appropriate and practicable steps have been taken to minimize the adverse environmental impacts.

4.2 Measures to minimize adverse effects - Refer to Section 4.1, Minimization.

4.3 Mitigation - The applicant has presented a thorough analysis of alternatives to avoid or minimize environmental impacts. Although the MPRP may have indirect impacts to upland and wetland habitat associated with vegetative clearing, these have been appropriately minimized through the measures taken by the applicant and noted above.

While the clearing operations associated with the MPRP will alter wetland functions and values, they will not eliminate them. Three general categories of wetland alteration will occur as a result of the MPRP: 1) forested wetland conversion, 2) permanent wetland fill, and 3) temporary wetland fill. The largest effect will be the alteration (but not filling) of 345 acres of forested wetland cover types by converting it to early successional wetlands dominated by scrub-shrub and/or emergent cover types. A majority of this conversion will occur within, or adjacent to, existing corridors and will have minimal new impact. Although there will be some effects on wildlife that depend upon forested wetland habitat, some wildlife species, such as passerines and small mammals, will benefit from the additional clearing and increase in shrub-scrub cover type, as will predators of these same species (e.g., raptors). Within the new approximately 6.4 mile transmission line corridor, the applicant's proposed minimization measures will help mitigate the short-term impacts of the MPRP and, once scrub-shrub and non-capable vegetative cover is re-established within the corridor, long-term impacts are expected to be minimal. The MPRP will also result in approximately 13.6 acres of permanent wetland impact, approximately 119 acres of temporary wetland impact, and alteration of approximately 1,285 linear feet of waterway.

The applicant prepared a Compensation Plan in consultation with the Corps and the MDEP that describes mitigation measures (restoration, enhancement, preservation, and in-lieu fee compensation) to be implemented to compensate for unavoidable impacts to wetlands and result in a "no-net-loss" of wetland functions and values. The applicant has proposed a multi-faceted and robust compensation package summarized in the numbered items below:

- a. To compensate for the approximately 345 acres of forested wetland cover type conversion, the applicant is proposing preservation of approximately 2,009 acres of comparable habitat at 10 compensation sites.
- b. Of a total of approximately 13.6 acres of permanent wetland impact, the applicant is proposing to compensate for approximately 5.4 acres of the permanent impact by enhancing approximately 13 acres of wetland habitat at three compensation sites, and preserving approximately 57 acres at one compensation site. The applicant also proposes to compensate for the remaining approximately 8.2 acres of permanent wetland impacts by establishing an In-Lieu-Fee payment of \$1,563,538 with the Corps and MDEP.
- c. To compensate for the approximately 119 acres of temporary wetland impact, the applicant is proposing preservation of approximately 420 acres of comparable habitat at a single compensation site.
- d. To compensate for the approximately 1,285 linear feet of waterway impact to Runaround Brook in the Town of Pownal, Maine, the applicant is proposing to relocate and restore approximately 1,700 feet of a currently channelized reach of Runaround Brook. In addition, the applicant has identified stream restoration sites that includes an approximately 2,100-foot-stretch of Montsweag Brook in the towns of Wiscasset and Woolwich, Maine and 100 feet of steam restoration on Day Brook in Kennebunk, Maine.
- e. To compensate for the permanent conversion of approximately 89.1 acres of vernal pool habitat to early successional habitat, the applicant is proposing preservation of approximately 821 acres of comparable habitat at seven compensation sites.

All temporary wetland impacts will be restored upon MPRP completion.

The Corps has determined that the proposed compensation adequately addresses the project's unavoidable direct and indirect impact to aquatic resources. The federal resource agencies concur. The permit has been conditioned to require its implementation.

5.0 Public Involvement

A Public Notice adequately describing the proposed work was issued on October 20, 2009 and sent to all known interested parties. All comments received are included in our administrative record of this action. All comments are noted and evaluated below:

5.1 Comments received:

5.1.1 Federal Agencies:

US EPA - In a letter dated December 1, 2009, the EPA indicated that the applicant had addressed the alternatives test required under Section 230.10(a) of the 404(b)(1) Guidelines and that he'd developed a sound compensation plan to include protection of high value resources. They had several suggestions to improve the plan including conservation easement language, stewardship funding, adding wetland creation components, and enhancing ecological value.

USFWS – USFWS provided no written comment in response to the public notice.

NMFS – In a letter dated February 3, 2010, NMFS deferred to USFWS on required endangered species consultation for any permit modifications or conditions necessary to address federally endangered Atlantic salmon or its designated Critical Habitat. They noted that the project may cross rivers known to support endangered shortnose sturgeon. If the project will affect sturgeon, they advised the Corps to initiate Section 7 consultation.

5.1.2 State and local agencies: State water quality certification was issued on April 5, 2010. A Certificate of Public Convenience and Necessity ("CPCN") from the Maine Public Utilities Commission ("PUC") was issued on May 7, 2010.

5.1.3 Organizations and individuals:

- **5.1.3.1** A total of 5 letters from the general public were received in response to the public notice, four opposed or with questions and one in favor. The citizen opposed to the project felt that the mitigation was inappropriate and insufficient. Those with questions wondered about specific areas of impact, actions to be taken to avoid habitat degradation, and how mitigation lands would be managed.
- **5.1.3.2** In an email dated November 21, 2009, the Tribal Preservation Officer for the Passamaquoddy Indian Tribe stated that the project would have no impact on cultural or other concerns of the tribe.
- **5.1.3.3** In a letter dated February 9, 2010, submitted after the expiration of the public comment period, an alternative energy group called Grid Solar objected to the project, arguing that there was no demonstrated need for the project and that the project was not the least environmentally damaging practicable alternative. This group is an advocate for solar power generation and associated interconnection and reliability facilities.

- **5.1.3.4** In a letter dated February 23, 2010, the Sierra Club recommended that the Corps reject the application on the grounds that less environmentally impacting, non-transmission options exist (the Grid Solar proposal). They emphasized that there was no demonstrated need for the project.
- **5.1.3.5** In a letter dated May 9, 2010, a Kennebec County conservation group echoed the position of the Sierra Club.
- **5.1.3.6** In a letter dated June 22, 2010, a 19-member condominium association in Farmingdale, Maine expressed specific concerns about the MPRP segment adjacent to their association. They concerns focused on health and noise effects and property devaluation and they recommended that the power lines be buried in that area.
- **5.2 Requests for public hearing:** No requests for a Corps public hearing were received in response to the public notice. The applicant conducted numerous public meetings throughout its planning process and both the Maine PUC and DEP conducted public meetings/hearings as part of their review processes.

5.3 Evaluation and Consideration of Comments:

5.3.1 The Corps has considered the comments of the federal, state, and local agencies, as well as the organizations and individuals. In addition, the applicant submitted supplemental materials in response to the comments from Grid Solar, the Sierra Club, and concurring groups, including an extensive study of whether NTAs could be substituted for any transmission line elements of the MPRP. By Maine statute, 35-A M.R.S.A Section 3132(6), the PUC specifically reviewed both the need for, and the viability of, alternatives to the project in the CPCN proceeding. In its order, the PUC made specific findings regarding the public need for the project, taking into account economics, reliability, public health and safety, scenic, historic and recreational values, the proximity of the proposed transmission line to inhabited dwellings, and alternatives to construction of the transmission line, including energy conservation, distributed generation or load management.

In response to the position and comments from Grid Solar, and by association its supporters, the PUC required the applicant to enter into negotiations with Grid Solar. In a negotiated settlement dated June 10, 2010, the applicant agreed to a number of stipulations to include funding a pilot solar power program, funding for a 10-year grant program for energy efficiency programs, and implementing a landowner dispute resolution program for specific landowners who are potentially adversely affected by MPRP construction. In a letter, dated June 11, 2010 and in view of the settlement agreement, GridSolar withdrew its objection, including all prior comments and submissions, from the Corps of Engineers consideration of the MPRP permit proceeding. Although the Sierra Club and the conservation group that commented to the public notice were not parties to the settlement agreement, the Corps finds that their substantive comments have been adequately addressed through the same process. The Corps has determined that the MPRP is the LEDPA pursuant to the Section 404(b)(1) Guidelines. The US EPA concurs.

The condominium residents identified health, noise, electrical interference, and property devaluation concerns associated with the project. Health and noise concerns are more appropriately addressed by the Maine Dept. of Environmental Protection ("DEP") and the Maine Public Utilities Commission ("PUC") both of whom have approved the project. Furthermore, the Corps notes that the existing electrical transmission lines in this area pre-date the condominium development by many years. The present owners either moved in or built with

full knowledge of the existence of the transmission corridor. The Corps has no standards for assessing property impacts but it is unclear how existing property values will be diminished when there is already a substantial power line in place and the area is largely open terrain. The larger issue affecting property values would appear to be the closure of the adjacent golf course several years ago. However, this had no relationship to the proposed project and is beyond the capability of the Corps or the applicant to address.

Utility corridors are not static and there should be a reasonable expectation that they may be upgraded/expanded as energy demands and technology evolve. The existing line that passes through the area is approximately 75' from the edge of the right-of-way ("ROW") closest to the association. This same line must be relocated 25' closer in order to accommodate an additional line. The second line will be placed south of the relocated line, approximately 130' away from the edge of the ROW. Neither line is expected to require additional ROW clearing in this area because the terrain is already largely open. Therefore, any existing buffer between the lines and the association is expected to remain. This information was conveyed to the property owners at the recent planning board meeting and site visit. The applicant has committed to the town and the landowners to continue to take all reasonable and practicable steps to avoid or minimize additional impacts from project construction.

In response to the recommendation that the transmission lines be buried, the Corps notes that burying the power lines in this area would cost approximately ten times more than the proposed design. This is not economically practicable. While it could be argued that this added cost might be minor compared to the major cost of the entire 350-mile long project, burial at this location would set a precedent that would encourage other affected communities or individuals to seek similar redesign. The applicant has clearly demonstrated that large scale burial of the utilities is not an economically practicable alternative. It also does not appear warranted at this location in view of the minor environmental impact almost all of which is occurring west of the association's area of concern. The town has been given the option of funding burial of the lines on behalf of the condominium association but has declined.

The Corps concludes that the applicant has demonstrated a need for the project and that it is the least environmentally damaging practicable alternative. Although the forecast for projected load levels has dropped due to the recession, the broad system needs identified appear at load levels that are likely to be reached within applicable planning timelines. In addition, the applicant has shown that its project is the least environmentally damaging practicable alternative to achieve the overall project purpose. These conclusions are supported by the decision of the PUC that the project is needed and that the project, as approved by the PUC, is the only appropriate alternative <u>under state law</u> to meet that need.

- **6.0** Analysis of Beneficial and Detrimental Impacts to the Environment and the Public Interest, and Factual Determinations for Discharges of Dredged or Fill Material [33 CFR 320.4(a-r), 33 CFR 325 App B, and 40 CFR 230.11 and 230.20 230.77]
- 6.1 Public interest review factors (33 CFR 320.4(a)(1)) All factors which may be relevant to the proposal have been considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

- **6.1.1 Conservation/Recreation**: The applicant prepared a Compensation Plan in consultation with the Corps and the MDEP that describes mitigation measures (restoration, enhancement, preservation, and in-lieu fee compensation) to be implemented to compensate for unavoidable impacts to wetlands and result in a "no-net-loss" of wetland functions and values. The applicant has proposed a multi-faceted and robust compensation package to include preservation of approximately 2,009 acres of comparable habitat at 10 compensation sites. These lands will be preserved in perpetuity and held in public trust by various conservation agents. The applicant also proposes an In-Lieu-Fee payment of \$1,563,538 with the Corps and MDEP which is expected to ultimately be used for similar conservation related actions within the State of Maine.
- **6.1.2 Economics:** The State of Maine's local economy will benefit from construction and operation of the MPRP. The applicant estimates that the MPRP would create an average of 2,131 jobs per year over a four-year construction period and increase wages and salaries in the state by an average of \$60.9 million per year. The MPRP would also increase Maine's Gross Domestic Product by nearly \$289 million over the four years. Furthermore, MPRP related tax revenues to state government are estimated for sales and income taxes at \$18 million over the four years. In addition, because the State of Maine is a member of a regional electrical grid (ISO-NE), the improvements to Maine's electrical grid via the MPRP would benefit the entire regional grid.
- **6.1.3 Aesthetics:** The applicant conducted an extensive Visual Impact Assessment ("VIA") where physical changes would occur along the 27 segments and substation sites. The VIA is contained in the administrative record. Approximately 98 percent of the MPRP's new, rebuilt, or re-rated transmission lines will be within, or immediately adjacent to existing transmission line corridors and 2 percent of proposed new transmission line will be within a new corridor. Co-location of the transmission lines within an existing electric transmission line corridor significantly reduces potential visual impacts. New structures will be set back as far as practicable from streams, rivers, and other areas of visual/habitat sensitivity. Wherever practicable, existing non-capable vegetation will be preserved within the transmission line corridor and visual buffer plantings consisting of native, non-capable species (species that would not reach a height that could interfere with or come into contact with electrical conductors) will be installed to minimize views into cleared transmission line corridors at certain road crossings where visual changes were determined to experience the greatest degree of change based on transmission line configuration, road type, number of viewers, viewing period, existing screening, and corridor alignment. Based on the applicant's VIA of the transmission line corridor, substation sites, and proposed buffer mitigation, the project is not expected to unreasonably interfere with existing scenic and aesthetic uses of scenic resources within each of their view sheds and should not have an unreasonable adverse affect on the scenic character of the surrounding area. The Maine DEP has reached the same determination.
- **6.1.4 General environmental concerns:** The bulk of the project's impacts are short-term and associated with clearing and construction operations. They are described in other sections of this document. Unavoidable impacts to the aquatic environment and the natural environment are addressed in the applicant's compensation plan or in permit conditions. More broad impacts to the public interest are noted below:
- **6.1.4.1** Noise. The results of the noise analysis for the MPRP are contained in the applicant's Corps Application materials. Modeling results for the transmission line conductors indicate that under certain meteorological conditions a modest increase in audible noise levels would occur at the corridor edge, but these levels would dissipate quickly as the distance from the corridor edge increases. Ambient

condition noise monitoring and subsequent modeling was conducted for new substations and existing substations that will be adding significant noise producing equipment. The results indicate that construction and operation of these substations will be in compliance with all applicable MDEP and municipal noise standards. To meet these standards, additional noise control measures may be required at two of the proposed new substations. Noise levels are expected to increase during construction and may be noticeable to nearby residents and the general public transiting the area. This effect will be limited to daylight hours and will cease upon completion of the MPRP.

- **6.1.4.2** Air quality. Temporary minor increases in air emissions may occur during construction of the MPRP resulting from ambient dust and diesel exhaust from heavy equipment. This effect will rapidly cease upon completion of the MPRP.
- 6.1.5 Wetlands: Wetlands in the MPRP area include a mix of palustrine forested, scrub-shrub, and emergent wetlands, and open water systems. The MPRP will have direct and secondary impacts to freshwater wetlands. Approximately 13.6 acres of wetland will be permanently impacted and 119 acres will be temporarily impacted. Secondary impacts will result from selective tree clearing of approximately 345 acres of forested wetlands within the transmission line corridor by converting it to scrub-shrub and/or emergent cover types. However, many of the principal functions and values of these wetlands will remain. Temporary fill impacts will be restored on completion of construction activities. The project's direct and indirect impacts to wetlands and other aquatic resources will be mitigated for through the implementation of a multi-faceted compensation plan.
- 6.1.6 Historic properties: Extensive cultural resource surveys (pre-historic archaeology, historic archaeology, and historic architecture) were conducted for the MPRP and reports have been submitted to the Maine State Historic Preservation Officer. Cultural resource surveys of the MPRP area were conducted to identify historic sites that would be eligible for the National Register of Historic Places within the Area of Potential Effect (APE) along the proposed program route. Phase 0, Phase IA and IB, Phase II, and Phase III surveys have been completed and consultation with the Maine Historic Preservation Commission (MHPC) has concluded. The applicant also initiated consultation with Tribes. Each of the tribal authorities was notified by the applicant of positive site findings at the conclusion of Phase I, Phase II, and Phase III surveys.

To address unavoidable impacts to historic resources, the Corps developed a Memorandum of Agreement ("MOA") with the applicant and MHPC. The MOA is dated February 8, 2010 and has been signed by all parties. With its implementation, MHPC has determined that the proposed project will not have a detrimental effect upon any structure or site of historic, architectural, or archeological significance as defined by the National Historic Preservation Act of 1966.

6.1.7 Fish and wildlife values: The MPRP area has a high diversity of wildlife species because of the variety of habitat types that will be crossed. Small and large mammals, a variety of waterfowl and wading birds, raptors, other birds, amphibians, many fish species, and reptiles are found throughout the entire length of the project corridor. The MPRP will permanently alter wildlife habitat where tree clearing takes place. With the re-establishment of early successional habitat vegetation within the area to be cleared of trees, long-term impact to wildlife is expected to be partially mitigated. The MPRP will convert approximately 345

acres of forested wetland and 1,250 acres of forested upland to early successional habitat. Potential significant or sensitive habitats that will be crossed by the MPRP transmission line corridor include eight mapped bald eagle essential habitats ("BEEHs"), 85 vernal pool habitats ("VPH"), 54 deer wintering areas ("DWA"), and 48 inland wading bird and waterfowl habitats ("IWWHs).

No BEEHs will be affected by the substation sites. The applicant will seasonally limit construction activities within mapped BEEHs and "candidate" BEEHs identified by the Maine Division of Inland Fisheries and Wildlife ("MDIF&W") or located during subsequent spring aerial surveys. This permit has been conditioned to require the installation of marker balls on a number of waterway crossings to reduce the potential of eagle and other large bird strikes/entanglements with the new transmission lines and to minimize the effect of clearing and construction activities near nesting or perching sites.

No filling of vernal pool depressions will occur. One substation would be within critical terrestrial habitat of a VPH (within 250') but many vernal pools will experience indirect impacts from clearing operations. Approximately 1 acre of vernal pool buffer habitat will receive permanent fill due to substation development. Approximately 89.1 acres of forested habitat surrounding existing vernal pools will be converted to scrub-shrub or herbaceous cover types. Around some pools this could affect long-term productivity of amphibian species like wood frog, spotted salamanders, and blue spotted salamanders. These indirect impacts are addressed in the applicant's compensation plan.

DWAs and IWWHs are resources of significance to the State of Maine. DWAs will be affected in the short-term by noise and human related disturbance associated with clearing operations. Implementation of the Vegetation Management Plan ("VMP") provisions is expected to minimize potential short-term and long-term impacts to this species and its habitat. IWWHs will similarly be affected by clearing and construction in the short-term. Long-term impacts will be similarly minimized with the implementation of the VMP. Unavoidable impacts to both of these resources are being addressed in the applicant's compensation plan.

The MPRP transmission line network will intersect 808 perennial and intermittent waterways. One waterway will be crossed by a substation access road and another will be relocated for a substation expansion. The latter is at least partially a man-made ditch that surrounds the existing substation. Temporary crossings of streams will either be spanned with mats or bridges or will consist of temporary fill and a culvert. Any temporary culverts will provide an opening of at least three times the cross sectional area of the stream channel. Any streams that support federally endangered Atlantic salmon, designated salmon critical habitat, or other coldwater fisheries will be completely spanned to avoid direct impact to those resources. Any temporary stream crossing has the potential of introducing indirect impacts to include sedimentation and turbidity, introduction of water pollutants, and locally increased exposure to sunlight and associated temperature increases. However, the applicant will implement its "Vegetation Management Practices: Maine Power Reliability Program" last revised March 31, 2010 (hereafter, "VMP") that includes provisions for maintaining an undisturbed vegetated buffer adjacent to the waterways to minimize indirect impacts. Maintenance of an undisturbed vegetated buffer is particularly important in streams providing habitat for the endangered Atlantic salmon and shortnose sturgeon.

6.1.8 Flood hazards: NA. Refer to Section 6.1.9, Floodplain values.

- 6.1.9 Floodplain values: A number of wetlands that will be affected by the MPRP have flooding/floodplain value; however, direct impacts to these wetlands will be minimal. The applicant estimates that, along its proposed 350-mile-long transmission line corridor route, 298 new transmission line structures will be within 100-year floodplains. Since these transmission line structures will result in very limited additional impervious surface, the MPRP will not cause or increase flooding or flood hazards or diminish the floodflow alteration ability of wetlands. None of the substation development is located within the 100-year floodplain.
- 6.1.10 Land use: Approximately 98% of the MPRP project involves an on alignment upgrade of existing utility corridors. These corridors pass through both urban and rural areas that include a wide range of vegetation cover types from open field to forest and upland to wetland. The 2% of new alignment (6.4 miles) passes through the same type of areas. Proposed substations and substation expansions will be located in a similar mix. Land uses include residential and commercial development, agriculture, forestry, and passive recreation. These uses are expected to continue throughout construction and upon completion of the project; however the project will result in the utilization of additional right-of-way that will be purchase or otherwise obtained from its present owners.
- 6.1.11 Navigation: Navigable waters in the State of Maine include any water subject to the ebb and flow of the tide, the Penobscot River to Medway, the Kennebec River to Moosehead Lake, and the portion of Lake Umbagog that is located in Maine. The project will cross the Penobscot and Kennebec Rivers which Congress declared navigable pursuant to Section 10 of the Rivers & Harbors Act for much of their length, including the proposed crossing sites. No impact to general navigation is expected. In the Kennebec, the majority of traffic is now only small motor craft, kayaks, and canoes. The crossing point in the Penobcot sees similar traffic but also small coastal cruise or excursion boats, light petroleum tankers, and barge traffic. Both locations already support existing transmission line crossings that will be upgraded. The existing crossings do not adversely impact navigation. In accordance with 33 CFR Part 322.5(i), the minimum sag height clearance for the proposed electrical transmission lines above the mean high water line or ordinary high water line of the rivers shall be no lower than 20' above the clearance of the fixed bridge(s) in the vicinity of the project site. The permit has been so conditioned.
- **6.1.12 Shore erosion and accretion:** The potential exists for minor destabilization of stream banks as vegetation is cut and removed to facilitate temporary crossings. The applicant will avoid removing the root mass of cut vegetation or otherwise disturbing the soil to the maximum extent practicable. All areas of unavoidable disturbance will be stabilized with seed/mulch and other erosion control measures to avoid long-term erosion issues. Any turbidity associated with crossing construction is expected to be a short-term and minimal.
- **6.1.13 Recreation:** Use of All Terrain Vehicles ("ATV"s) along the transmission line corridor is not allowed by the applicant, snow mobile use is and CMP has developed agreements with a number of local snowmobile clubs. Existing trails will not be affected by the project. With wider corridors there could be some increase in snow mobile use. The trails will also continue to be used to the degree that they are now by hunters, hikers, fishermen, cross country skiers, and snowshoers.

- 6.1.14 Water supply and conservation: The project is not expected to adversely affect surface or groundwater supplies. Risks to these resources during clearing and construction will be minimized with the implementation of the applicant's VMP and Spill Prevention, Countermeasures and Control ("SPCC") plan. Longer-term risks to these resources at constructed or expanded substations will be minimized with the implementation of a SPCC plan. Four of the substations will have water supply wells. These are not expected to negatively affect groundwater supplies.
- 6.1.15 Water quality: Temporary minor impacts to water quality in perennial and intermittent waterways may occur during clearing, grading, access road construction and/or repair, and transmission line/substation construction. To minimize these impacts, the applicant will implement its "Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Programs (Guidelines)," which are consistent with the MDEP's March 2003, "Maine Erosion and Sediment Control Best management Practices (BMPs)". Implementation of erosion and stormwater control measures contained in the applicant's Guidelines will minimize this effect. In addition, all MPRP related construction sites will be restored and any minor impacts to water quality will be ameliorated.
- **6.1.16** Energy needs/Needs & Welfare of the People: The MPRP will have a very positive effect since it will provide improvements to CMP's bulk power transmission system to ensure compliance with federally mandated power transmission system standards; to continue to provide safe, cost-effective, and reliable service to its customers; to meet the growing electrical demand of Maine customers; and to meet the reliability standards established by the NERC, NPCC, and ISO-NE.
- **6.1.17 Safety:** The project is intended to improve public safety by improving overall reliability of transmission capabilities within the designated corridor.
- **6.1.18 Food and fiber production:** This project will have no effect on food and fiber production.
- **6.1.19 Mineral needs:** This project is not expected to result in the depletion of any mineral resources.
- 6.1.20 Considerations of property ownership: Approximately 98% of the project will occur along existing transmission line corridors. However, additional right-of-way must be obtained to implement the upgrade project. This will be accomplished prior to any construction, in some cases through negotiated settlement. Landowners adjacent to the right-of-way will experience clearing and construction related disturbance until the project is completed. These effects will be limited to daylight hours. Once construction is complete these impacts will cease but some landowners are likely to experience long-term impacts to include loss of buffer vegetation, increased visual impact, increased noise levels, and possible exposure to electromagnetic fields ("EMF").

6.2 Additional Public Interest Review General Criteria (33 CFR 320.4(a)(2):

6.2.1 The relative extent of the public and private need for the proposed work: Refer to Energy Needs in Section 6.1.16 of this document.

- 6.2.2 The practicability of using reasonable alternative locations and/or methods to accomplish the objective of the proposed structure or work: Refer to Alternatives in Section 3.0 of this document
- 6.2.3 The extent and permanence of the beneficial and/or detrimental effects that the proposed structures or work may have on the public and private uses which the area is suited: The project will result in permanent impacts to aquatic resources and long-term effects on the landscape. Unavoidable impacts to aquatic and other natural resources are addressed in the applicant's compensation plan. Unavoidable impacts to historic resources and endangered species resources are addressed in permit conditions. Other impacts are largely short-term and construction related. Approximately 98% of the project is occurring along existing right-of-way, the public's use of which is generally not prohibited. To the degree that the public or private landowners use this corridor now, that use is expected to continue.

6.3 Section 404(b)(1) Guidelines Impact Analysis (Subparts C-F)

- **6.3.1 Substrate:** The substrate along the transmission corridor consists of variable layers of organic material overlying silt, sand, clay, stone, and ledge. Soil survey information for the transmission corridor and the substations is contained in the administrative record. Temporary fill will be placed on top of filter fabric or will consist of timber mats that when removed will result in minimal impact to the substrate. Areas of permanent fill will replace existing topsoil material with a variety of earthen or granular materials.
- **6.3.2** Suspended particulates/turbidity: Temporary minor turbidity may occur waterway and wetland crossings. This effect is expected to rapidly diminish upon completion of the project.
 - **6.3.3 Water:** Refer to 6.3.2 above.
- **6.3.4 Current patterns and water circulation:** Once the transmission line construction is complete, all affected areas with the exception of areas occupied by poles will be allowed to re-vegetate. The corridor will be dominated by a variety of shrubs and herbaceous species and non-capable trees. Therefore, the project is not expected to alter existing drainage patterns or water circulation particularly in the long-term when all temporary access roads and stream crossings have been removed. At the substations, site specific stormwater management measures will be implemented to comply with state requirements for no increase in post construction flows.

6.3.5 Normal water level fluctuations: See 6.3.4 above.

- **6.3.6 Salinity gradients:** Any crossing of tidal waters is a clear span that will not physically affect the waterway. All other work is in freshwater aquatic resources.
- 6.3.7 Threatened and endangered species: Many of the streams along the project corridor support federally endangered Atlantic salmon or its critical habitat. The Corps has consulted with US Fish & Wildlife Service ("USFWS"). In a letter dated July 18, 2010, USFWS concurred that the project is not likely to adversely affect the species or result in an adverse modification of its habitat. The permit has been conditioned to require a number of actions to avoid or minimize potential impacts to the species and its habitat.

Although no longer listed as federally endangered or threatened, American bald eagle will also be potentially affected by the project. Pursuant to the Bald and Golden Eagle Act, the Corps has coordinated with USFWS. The permit has been conditioned to require a number of actions to avoid or minimize potential impacts to the species.

Also not federally listed at present is New England cottontail. New England cottontail rabbit, a state listed endangered species and a candidate species for federal listing, is present in the overall project area. According to USFWS, cottontails generally benefit from brushy conditions commonly associated with utility corridors. The applicant has consulted with Maine IF&W and USFWS concerning New England cottontail. Conditions to avoid or minimize impacts to the species and its habitat are provided in the document "Conservation Management Standards for Avoidance and Minimization of Take and Harassment of State Endangered and Threatened Species" dated "April 6, 2010". This document is contained in the administrative record and referenced by condition in this permit.

There are no outstanding federal or state endangered species issues.

- **6.3.8 Fish, crustaceans, mollusks, and other aquatic organisms in the food web:** For fisheries, refer to Section 6.1.7 of this document. Crustaceans and mollusks will not be affected by this project. Impacts to other aquatic organisms are expected to be minimal and of short duration.
 - **6.3.9 Other wildlife:** Refer to wildlife in Section 6.1.7 of this document.
 - 6.3.10 Special aquatic sites:
- **6.3.10.1 Sanctuaries and refuges:** There are no sanctuaries or refuges present in the project area.
 - **6.3.10.2** Wetlands: Refer to wetlands in Section 6.1.5 of this document.
- **6.3.10.3 Mud flats:** The only mudflats present are along the banks of the Penobscot and Kennebec Rivers. These will be fully spanned and will not be affected by this project.
- **6.3.10.4 Vegetated shallows:** There are no vegetated shallows present in the project area.
 - **6.3.10.5 Coral reefs:** There are no coral reefs present in the project area.
- **6.3.10.6 Riffle and pool complexes:** There are no riffle/pool complexes present in the project area.
- **6.3.11 Municipal and private water supplies:** Portions of the transmission line corridor and two of the substations are located over mapped sand and gravel aquifers. The project does not propose any withdrawal from or discharge to groundwater resources. A Spill Prevention, Countermeasures and Control plan

("SPCC") for the substations has been developed to minimize the risk of oil or contaminant spills. The applicant's VMP contains provisions for minimizing risk to surface and ground waters during clearing and construction activities. The Maine DEP has determined that the project will not have an unreasonable adverse effect on ground water provided the applicant follows the standards contained in the VMP and SPCC plan. Four of the substations will include new water supply wells. The DEP has determined that there is an adequate supply of groundwater at each site.

- **6.3.12 Recreational and commercial fisheries:** Temporary minor disturbance of finfish populations may occur at construction crossings of streams. All streams that support cold-water fisheries like brook trout and those streams that have been identified as Critical Habitat for federally endangered Atlantic salmon will be fully spanned in order to minimize potential impacts. It is possible that vegetation clearing near stream corridors could result in water temperature increases. To the extent practicable, only selective overstory clearing will occur in these riparian areas to minimize this effect.
- **6.3.13 Water-related recreation:** Temporary disruption or disturbance of recreational uses may occur during construction but in the long-term, little if any effect is expected.
- **6.3.14 Aesthetics:** Approximately 98% of the project utilizes existing utility corridor. Although this corridor will be widened, the net visual effect is expected to be little different than existing conditions. The 2% of new alignment will introduce new cleared areas that to some will alter the overall aesthetics of the landscape.
- 6.3.15 Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar areas: There are none of these resources present in the project area.
- **7.0 Endangered Species Act.** The applicant and the Corps have consulted with USFWS pursuant to Section 7 of the Endangered Species Act. Species of concern included New England cottontail rabbit, bald eagle, Atlantic salmon, and shortnose sturgeon. In a letter dated July 18, 2010, USFWS stated that the proposed MPRP is not likely to adversely affect rabbits, eagles, and salmon. Sturgeon will not be affected by the project since all sturgeon waterways will be spanned by transmission lines just as they are now, with no in water work or shoreline disturbance. NMFS concurs.
- **8.0 Essential Fish Habitat ("EFH").** The Penobscot and Kennebec Rivers provide EFH for a variety of species. The project will fully span these waterways and will not affect EFH. Many of the other waterways along the corridor are designated critical habitat for federally endangered Atlantic salmon and as such, represent EFH. The Corps has consulted with the National Marine Fisheries Service ("NMFS") regarding the effects of the project on EFH designated under the Magnuson-Stevens Fishery Conservation and Management Act. The NMFS did not provide EFH recommendations. They deferred to USFWS and the Section 7 consultation process. As noted above, the permit has been conditioned to minimize impacts to the species and its critical habitat.
- **9.0 Historic Properties.** The applicant conducted Phase 0, Phase IA and IB and Phase II archaeological surveys. The Maine Historic Preservation Commission ("MHPC") has determined that the project could have

an adverse effect on seven pre-contact and twenty-two post-contact archeological sites, one National Register eligible architectural structure, and one eligible historic district. In response, the Corps developed a Memorandum of Agreement ("MOA") which includes stipulations for avoidance, minimization, and mitigation of affected historic resources. Implementation of the stipulations contained in the MOA is a condition of this permit. Per request of the Penobscot Nation Archaeology Department, each of Maine's Indian tribes was provided with a comprehensive list of all archaeological sites recommended for Phase II and Phase III surveys and were sent a copy of the public notice from the Corps. In an email dated November 21, 2009, the Tribal Historic Preservation Officer ("THPO") for the Passamaquoddy Tribe indicated that the project would have no effect on cultural and historical concerns of the tribe. In a letter to the applicant's consultant dated February 11, 2010, the THPO for the Penobscot Nation indicated that the project would have no impact on sites of cultural, historic, or religious significance to the tribe. No other comments were received from the tribes nor have they expressed concern in telephone conversations. This concludes Corps responsibility under Sec. 106 of the National Historic Preservation Act.

10.0 Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians. Refer to Section 9.0 above.

11.0 Impact Analysis.

INDIRECT AND CUMULATIVE IMPACTS 230.11(g) and 230.11(h) (effects on the aquatic ecosystem, associated with discharge of fills), also 320.4(a)(1): Indirect effects are caused by the proposed action and are later in time or farther removed in distance, but are still reasonably foreseeable indirect consequences to the environment (40 CFR Part 1508.8(b)). Cumulative impacts are the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR Part 1508.7).

Indirect impacts would primarily include the effect of corridor clearing and continued future maintenance. The effects of tree clearing are already discussed in this document. Periodically, the cleared areas will have to be maintained as trees and saplings threaten the safety zone of the transmission lines. This will cause a periodic disturbance to wildlife, but represents a minimal long-term impact on wildlife and its habitat. According to the applicant there will be a need to perform an initial round of maintenance within one year of MPRP completion since some species' grow rapidly in freshly cleared areas. Following that effort the applicant will generally adopt a 4-year maintenance cycle.

Cumulative impacts generally result from other development projects in the MPRP area that may result in a cumulative loss of aquatic resources. For most cumulative impact assessments, the Corps reviews available databases for past permit actions in the MPRP area. In this case that does not appear to be practical or reasonable due to the length and number of municipalities that would be crossed by the MPRP. Surrounding development ranges from undeveloped forest and other lands to rural/suburban/urban residential and commercial. No meaningful change in MPRP structure, function, or purpose will occur, nor will the overall character of the existing transmission line corridor. The MPRP is not expected to stimulate secondary development. From a broad perspective, Corps permit actions in the MPRP area have been for a variety of projects, of varying scales, and in numerous municipalities with no relationship to the proposed MPRP. The

Corps has determined that the cumulative effect of these projects to aquatic resources when added to the MPRP is minimal due to their small individual size, their widely distributed locations throughout the municipalities and state, the length of time between actions, and case-by-case avoidance, minimization, and mitigation measures. Future development proposals will be evaluated on a case-by-case basis by the Corps and the interagency review team in order to assess their individual and cumulative impact relative to the MPRP and any mitigation requirements.

12.0 SECTION 176(C) OF THE CLEAN AIR ACT GENERAL CONFORMITY RULE REVIEW:

The EPA regulations published as "General Conformity Rule" (58 FR 63214, November 30, 1993) to implement section 176(c) of the Clean Air Act for non-attainment areas and maintenance areas require that Federal actions, unless exempt, conform with the Federally approved state implementation plan. The impacts on air quality associated with the regulated activity described in this EA/SOF (discharge of dredged or fill material into waters of the U.S. (Section 404 of the Clean Water Act) have been considered and will not exceed de minimus levels of direct emissions of a criteria pollutant or its precursor, and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps continuing program responsibilities, and generally cannot be practicably controlled by the Corps. Therefore, a conformity determination is not required.

13.0 Special Conditions and Rationale for Inclusion

- 13.1 The following special conditions were included in the State Section 401 Water Quality Certification: Refer to attached state permit and water quality certification.
- 13.2 The following special conditions will be included in the permit to ensure the project is not contrary to the public interest [33 CFR 320.4(r)], to ensure the project complies with the 404 (b)(1) Guidelines [40 CFR 230.10(d)], requirements pertaining to compensatory mitigation for losses of aquatic resources [33 CFR 320.4(r)(2)] and/or as per the permittee's request [33 CFR 325.4 (b)].
 - **13.2.1** Refer to attached permit.

14.0 Compliance with Other Federal, State, or Local Laws

- **14.1 State 401 Water Quality Certification:** State water quality certification was issued on April 5, 2010.
- 14.2 State and/or local authorizations (if issued): A State Certificate of Public Convenience and Necessity was issued by the Maine Public Utilities Commission on May 7, 2010. Local authorizations continue to be obtained by the applicant on an as needed basis. Not every affected town requires approval.
- 14.3 Environmental justice issues (E.O. 12898): The proposed project will occur in an area with a relatively small minority population with social and economic characteristics below or comparable to the state wide average. Approximately 98% of the project will occur along existing utility right-of-way. Existing uses

of lands over which the project passes are expected to continue. Disproportionately high or adverse environmental effects will not result to either minority or low income populations of the state or on the population as a whole.

15.0 Determinations

15.1 Public Interest Determination: I find that issuance of a Department of the Army permit, as prescribed by regulations published in 33 CFR 320 to 330, and 40 CFR 230:

[X] Is not contrary to the public interest (with the inclusion of special permit conditions described in section 6.3 of this document).

[] Is contrary to the public interest.

15.2 Evaluation of Compliance with 404(b)(1) Guidelines:

15.2.1 Alternatives Test (40 CFR 230.10(a)):

Based on the discussion in II.B., are there available, practicable alternatives having NO less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "waters of the U.S." or at other locations within these waters? Refer to Section 3.0 of this document.

Based on II.B., if the project is in a special aquatic site and is not water dependent, NO has the applicant clearly demonstrated that there are no practicable alternative sites available? Refer to Section 3.0 of this document.

15.2.2 Special Restrictions (40 CFR 230.10(b)). Will the discharge:

Violate state water quality standards? State WQC issued 4/5/10

NO

NO

Violate toxic effluent standards [under Section 307] of the Clean Water Act? NO Explain and provide or reference documentation

Jeopardize endangered or threatened species or their critical habitat? Refer to summary of Section 7 consultation with USFWS and permit Conditions designed to avoid/minimize impacts to species and its critical habitat.

Violate standards set by the Department of Commerce to protect marine sanctuaries? NO

None present

15.2.3 Other restrictions (40 CFR 230.10(c)): Will the discharge contribute to significant degradation of "waters of the U.S." through adverse impacts to:				
Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and/or special aquatic sites? Refer to Section 6.1 of this document.	NO			
Life stages of aquatic life and/or wildlife? Refer to Section 6.1 of this document	NO			
Diversity, productivity, and stability of the aquatic life and other wildlife? Or wildlife habitat or loss of capacity of wetlands to assimilate nutrients, purify water or reduce wave energy? Refer to Section 6.1 of this document.	NO			
Recreational, aesthetic, and/or economic values? Refer to Section 6.1 of this document.	NO			
15.2.4 Actions to minimize potential adverse impacts [mitigation](40 CFR 230.10(d))? Will all appropriate and practicable steps [40 CFR 230.70-77] be taken to minimize adverse impacts of the discharge on the aquatic ecosystem? Does the proposal include satisfactory compensatory mitigation for losses of aquatic resources [33 CFR 332, 40 CFR 230, Subpart J]? Explain and provide or reference documentation				
15.3 Findings of Compliance or Non-compliance with the 404(b)(1) Guidelines (40 CFR 230.12):				
[] The discharge complies with the guidelines.				
[X] The discharge complies with the guidelines, with the inclusion of the appropriate and practicable conditions listed above (section 6.3.2) to minimize pollution or adverse effects to the affected ecosystem.				
[] The discharge fails to comply with the requirements of these guidelines because:				
[] There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem and that alternative does not have other significant adverse environmental consequences.				
[] The proposed discharge will result in significant degradation of the aquatic ecosystem under 40 CFR 230.10(b) or (c).				
[] The discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem, namely				
[] There is not sufficient information to make a reasonable judgment as to whether or not the proposed discharge will comply with the guidelines.				

- 15.4 Finding of No Significant Impact (FONSI) (40 CFR 1508.13): I find that based on the evaluation of environmental effects discussed in this document, the decision on this application is not a major federal action significantly affecting the quality of the human environment. Under the Council on Environmental Quality ("CEQ") NEPA regulations, "NEPA significance" is a concept dependent upon context and intensity (40 C.F.R. § 1508.27.) When considering a site-specific action like the proposed upgrade of an existing electrical transmission corridor, significance is measured by the impacts felt at a local scale, as opposed to a regional or nationwide context. The CEQ regulations identify a number of factors to measure the intensity of impact. These factors are discussed below, and none are implicated here to warrant a finding of NEPA significance. A review of these NEPA "intensity" factors reveals that the proposed action would not result in a significant impact—neither beneficial nor detrimental—to the human environment. Hence, an environmental impact statement is not required.
- 15.4.1 Impacts on public health or safety: The loss of wetlands along this 354 mile corridor is not expected to adversely affect public health or safety. In fact, the increase in system reliability is expected to result in an overall benefit to public safety.
- 15.4.2 Unique characteristics: The proposed project conforms to the existing use and facilities along the corridor. Approximately 98% of the upgrade will occur along existing electrical transmission line corridor. The impacts to waters of the United States are discussed above, and do not constitute a significant impact. There are no designated parklands, wild and scenic rivers, or prime farmlands impacted. The permit has been conditioned to further minimize the project's short-term, long-term, and cumulative impacts.
- 15.4.3 Controversy: The concept of "controversy" in NEPA significance analysis is not simply whether there is opposition to the proposal, but whether there is a substantial technical or scientific dispute over the degree of the effects on the human environment. The minimal public response to the Corps public notice has been adequately addressed and there are no unresolved public interest issues. The federal resource agencies have no objections to permit issuance.
- **15.4.4 Uncertain impacts:** The impacts of the proposed project are not uncertain, they are readily understood based on numerous past experiences the Corps has had with similar projects. These impacts are discussed above.
- 15.4.5 Precedent for future actions: The decision here is based upon the facts of the proposed project, and does not set precedent for future Corps permit decisions, which, like this decision, will be based upon their own merits and their own facts.
- **15.4.6** Cumulative significance: As discussed above, to the extent that other actions are expected to be related to project as proposed, these actions will provide little measurable cumulative impact, certainly not to the level of NEPA significance.
- **15.4.7 Historic resources:** As noted above, the Corps developed an MOA in consultation with the MHPC to address potential adverse impacts to historic resources. All parties have signed the MOA and the permit has been conditioned to require its implementation. There are no other outstanding Section 106 issues with MHPC or Maine's Indian Tribes.

- 15.4.8 Endangered species: The Corps concluded, and USFWS agreed, that the project is unlikely to adversely affect species or critical habitat listed under the Endangered Species Act.
- 15.4.9 Potential violation of state or federal law: This action, if permitted by the Corps, would not violate federal law, and as evidenced by the issuance of state permits and water quality certification, does not violate state law.
- 15.5 I have considered all factors relevant to this proposal including cumulative effects. Potential factors included conservation, economics, esthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. After weighing favorable and unfavorable effects as discussed in this document, I find that this project is not contrary to the public interest and that a Department of the Army permit should be issued.

Juffle Buch
DISTRICT ENGINEER

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