tjd&a | Terrence J. DeWan & Associates
Landscape Architects & Planners

August 12, 2018

To: James Palmer/Peer Reviewer
From: Amy Segal/TJD&A

Re: NECEC - Response to Request for Basic Visual Impact Forms (Appendix A) Supplemental Data

Dear Jim,

As requested, we have attached a summary (Summary) of the visual impact ratings from the Appendix A: Basic Visual Impact Assessment Forms (DEPLW0541-A2002) for Central Maine Power Company's (CMP) NECEC Project. For ease of your review, the information from the forms has been consolidated into a spreadsheet format.

As you may know, the Appendix A Form was developed by the Department of Environmental Protection (MDEP) as a guidance tool for staff to review Visual Impact Assessments (see the attached 2003 memo from Judy Gates[1]). These forms are not technically required to be completed or submitted by the applicant per the Natural Resources Protection Act Chapter 315 rules and are not available for download from the MDEP website, but we have completed and provided these forms in addition to the previously requested data sets at your request to assist in your reasonableness and technical correctness review of the Visual Impact Assessment (VIA). The VIA included the same assessment criteria that are outlined on the Appendix A forms: Visual Elements of Landscape Compatibility (and sub-elements of Color, Form, Line, and Texture), Scale Contract, and Spatial Dominance.

We have completed the forms/ratings for all of the photosimulations prepared for the September 2017 submittal and for the post-submittal photosimulations of the Upper Kennebec River (Photosimulations 30, 31, 32, and 33). Note that Photosimulation 32 is from the same general location as Photosimulation 10 which was included in the original submission. Two reviewers (Terrence DeWan and me) completed the forms and are reflected in the Summary as 'Reviewers A and B'. We have included additional information regarding the Upper Kennebec River Crossing below, to assist you in your review.

Also, as noted on the Summary, there are three locations that resulted in a potentially 'Strong' Visual Impact: (1) Moxie Stream crossing in Moxie Gore, (2) the Appalachian Trail crossing at Troutdale Road in Bald Mountain TWP, and (3) Fickett Road Substation in Pownal. We have

[1] Department of Environmental Protection, Standard Operating Procedure Memo for Guidelines for Assessing Impacts to Existing Scenic and Aesthetic Uses under the Natural Resources Protection Act, by Judy Gates, dated July 20, 2003.

provided descriptions of our findings for those three locations below, to assist you in your review.

Upper Kennebec River Crossing

For the Upper Kennebec River crossing, the overall average Visual Impact Severity rating (from the five viewpoints) was "Moderate." In referencing Appendix B: Visual Impact Assessment Matrix, a "Moderate" rating of a "Medium" Scenic Significance of View is an "Acceptable with Minor Mitigation" visual impact.

The section of the Upper Kennebec River where the Project will cross is not the area of highest scenic significance, but rather of "Medium" significance due to the absence of Class III-V rapids. According to American Whitewater, the Kennebec Gorge extends for 3.5 miles from Harris Station Dam to Carry Brook.[2] Downstream of the Class III and IV rapids that run through the Gorge, after Carry Brook, "the river becomes more sluggish the further downstream you go."[3] The proposed crossing of the Kennebec River is about three miles downstream of the last major Class III and IV rapids (Black Brook Rapids). The three miles between Black Brook Rapids and the Project's proposed overhead crossing location include occasional Class I or II rapids. At the proposed crossing location, the river is generally flat water, and is not particularly valued by recreational users compared to the whitewater sections of the river. CMP has sited the Project at this flat water location to minimize its impact on existing scenic and recreational uses.

Length of View and Viewer Expectation

There is a note on the bottom of the Appendix B matrix that states as follows: "Chart is recommended method for reviewing visual impacts and determining level of effort required for mitigation and/or reconsideration of project siting and design. Application of the recommended actions should consider length of view and viewer expectation."

The transmission line at the proposed crossing location will be visible for only about 0.25 mile from the upstream side and 0.5 mile from the downstream side (assuming rafters turn around and look up after passing under the crossing, which would not be expected). With a typical current and raft/boat speed of about 6 miles per hour, the proposed transmission line crossing of the river would be visible for only about 2.5 minutes from the upstream side and 5 minutes from the downstream side, again assuming rafters would turn around for this view. Careful siting of this crossing has thus limited the duration of this view to a very short period of time relative to the typical rafters' time on the water of approximately 4 hours.

One rafting company currently uses a picnic area 750 feet (0.14 miles) north of the proposed crossing. Recreational users of this picnic area would potentially have an extended duration of

[2] *See* https://www.americanwhitewater.org/content/River/detail/id/438.

[3] *Id.*

121 West Main Street, Yarmouth, ME 04096 207.846.0757 www.TJD&A.net

Project visibility (see Photosimulation 10 and 32), but CMP could reassign that company to use one of 11 other permitted picnic sites, none of which would have Project views.

Viewer expectations for Kennebec River recreational users are affected and moderated by the experience of traveling adjacent to a transmission line on Indian Pond Road for five miles to the river put-in site below Harris Dam, preparing for the rafting experience adjacent to Harris Dam and nearby existing transmission lines, and users' general awareness of the dependency on controlled dam releases to create the water flows necessary for this commercial recreational experience.

Additional Mitigation

CMP has proposed several additional mitigation measures to minimize the visual impact to the Upper Kennebec River including (1) the use of HVDC structures made of self-weathering steel, which will result in minimal color contrast with the surrounding wooded landscape, (2) the use of non-specular conductors, which will reduce reflective qualities of the conductors when viewed from the river, and (3) the preservation of existing mature tree growth within the corridor on each side of the crossing.

The initial river crossing design (as submitted in September 2017) included five structures that would have been partially visible from within the corridor and highly visible from south of the crossing (looking back upriver). Post-submittal redesign of this crossing, with three structures, resulted in the preservation of additional existing mature tree growth on each side of the corridor (for a total forested buffer width of 300' on the southeast side and 550' on the northwest side).

The preserved forested buffers will completely screen the transmission structures and corridor clearing from view when approaching the crossing on the river and at the crossing location and significantly reduce visibility of the structures when viewing from south of the crossing (looking upstream from the river). The conductors will be the only visible element of the Project from the crossing.

Moxie Stream

The Visual Impact Severity rating for Moxie Stream is "Strong." While the entire 12 miles of the Stream from Moxie Pond to the Kennebec River is designated as 'Scenic' in the Maine River Study, the highest scenic significance portion of the stream is the Moxie Falls Scenic Area located approximately 0.5 miles upstream from the Kennebec River. The Scenic Area includes a parking lot and trails to several viewing platforms on the south side of the 90-foot drop waterfall. The viewing platforms within the Moxie Falls Scenic Area are 0.5 miles to the south of the closest point of the Project and 1.6 miles downstream of the proposed crossing of Moxie Stream. The Project will not be visible from any portion of the Moxie Falls Scenic Area.

121 West Main Street, Yarmouth, ME 04096 207.846.0757 www.TJD&A.net

The area with the lowest scenic significance on Moxie Stream is where the existing transmission line is adjacent to Indian Pond Road leading to Harris Dam and crosses north of Moxie Pond, approximately 2.7 miles north (upstream) of the Project crossing. The Project crossing of the Stream is approximately 650 feet south of the location where Fish Pond Road once crossed the stream. Where the Project will cross is not the highest scenic significance section of Moxie Stream, but rather is of "Medium" significance due to its distance from the Scenic Area and proximity to the former road crossing. In referencing Appendix B: Visual Impact Assessment Matrix, a "Strong" rating of a "Medium" Scenic Significance of View is an "Acceptable with Mitigation" visual impact.

Length of View and Viewer Expectation

The transmission line at the proposed Moxie Stream crossing location will be visible for only about 800 feet on the upstream side approaching the crossing (for kayakers) and approximately 1,000 feet on the downstream side (if an angler walks upstream). The Stream is kayaked only at high water times due to the rocky nature of the streambed. A kayaker's duration of exposure would be limited to one or two minutes traveling at about 6 miles per hour. Careful siting of this crossing in a narrow curve in the stream has limited the duration of this view to a very short period of time. Viewer expectations for recreational boaters of the stream are generally high, but moderated by the presence of the existing transmission line near Moxie Pond.

Additional Mitigation

CMP has proposed several additional mitigation measures to minimize the visual impact to Moxie Stream, including (1) the use of HVDC structures made of self-weathering steel, which will result in minimal color contrast with the surrounding wooded landscape, (2) siting the structures 410 feet from the stream on the north side and 560 feet on the south side of the stream, to minimize visibility, (3) the preservation and maintenance of existing non-capable riparian woody and herbaceous vegetation within the crossing area, and (4) a buffer planting plan for shoreline areas that will be prepared and submitted to MDEP, in order to further mitigate the visual impacts of the additional transmission line. Once the preserved vegetation and supplemental buffer plantings become established, views from the stream of the corridor clearing and the transmission structures will be significantly minimized.

Appalachian Trail Crossing

We also completed the Basic VIA Forms for three viewpoints on the Appalachian Trail (Trail), which include Pleasant Pond Mountain (Photosimulation A), Troutdale Road (Photosimulation B – Joe's Hole), and Bald Mountain (Photosimulation C), from Appendix E of the VIA.

The Visual Impact Severity ratings from each of the elevated mountain viewpoints were "Minimal" ('Weak or Negligible' is the term used on Basic VIA form) due to the minimal corridor visibility from 2.8 to 3.0 miles away. See the VIA Report for descriptions from Pleasant Pond Mountain and Bald Mountain.

121 West Main Street, Yarmouth, ME 04096 207.846.0757 www.TJD&A.net

The Trail crosses the existing transmission line three times in close proximity to Troutdale Road/Joe's Hole on the south end of Moxie Pond. The middle location was selected for the photosimulation and the resulting Visual Impact Severity rating is "Strong."

The National Park Service (NPS) has only an easement over the existing 300' wide CMP-owned corridor, granted by CMP in 1987. When CMP granted this easement to the NPS, the Trail crossed the existing transmission line corridor in three locations (slightly different locations but similar to existing conditions). Hikers currently expect to cross the existing transmission line in this location, as it is noted in various guide books. The easement also allows CMP to place an additional transmission line in this location. Thus, NPS knew about the existing transmission line when it obtained this easement, as well as the possibility of a future transmission line in this location. Further, this section of the Trail is located on a public road for approximately 900 feet, and is in close proximity to several houses. For these reasons, this portion of the Trail has a "Low" Scenic Significance. In referencing Appendix B: Visual Impact Assessment Matrix, a "Strong" rating of a "Low" Scenic Significance of View is an "Acceptable with Minor Mitigation" visual impact.

Length of View and Viewer Expectation

As noted above, hikers currently expect to cross the existing transmission line multiple times in this location, as it is noted in various guide books. Further, this section of the Trail is located on a public road for approximately 900 feet, and is in close proximity to several houses.

Additional Mitigation

The new corridor will be maintained in accordance with current vegetation management protocols, resulting in preservation of non-capable woody and herbaceous riparian vegetation along the pond's shoreline ("non-capable" refers to woody plant species and specimens that are unlikely to grow tall enough to encroach into the conductor safety zone). Photosimulation B, from Troutdale Road, reflects a more immediate condition of vegetation after installation of the Project, rather than projecting vegetation growth 5 to 10 years post-construction. The non-capable vegetation allowed to grow within the corridor will reduce the amount of the clearing visible to hikers on the Trail and to motorists on Troutdale Road. Further, a buffer planting plan for the area southeast of Troutdale Road (between Joe's Hole and Troutdale Road), as well as the area northwest of Troutdale Road, will be prepared and submitted to MDEP, and native non-capable shrubs will be allowed to grow in this area, in order to further mitigate the visual impacts of the additional transmission line.

Fickett Road Substation

The Visual Impact Severity rating for the Fickett Road Substation as viewed from Fickett Road was "Strong." Fickett Road is not designated as a Scenic Byway or Scenic Road by the State Department of Transportation or the Town of Pownal and is therefore categorized as an 'Unrated' Scenic Significance of View. Motorists, pedestrians, and abutting residences will see

121 West Main Street, Yarmouth, ME 04096 207.846.0757 www.TJD&A.net

the Substation in context with the two existing 115kV transmission lines crossing Fickett Road, the existing 115kV and 345kV transmission lines crossing the fields, and Allen Road connecting into the Surowiec Substation.

In referencing Appendix B: Visual Impact Assessment Matrix, a "Strong" rating of an"Unrated" Scenic Significance of View is a "Low/No Impact" visual impact. However, due to the residential abutters on the north side of the road directly across from the substation, CMP is proposing buffer mitigation similar to what was approved for other substations as part of the Maine Power Reliability Program.

Length of View and Viewer Expectation

Motorists traveling on Fickett Road would see the proposed substation directly adjacent to Fickett Road for approximately 350 feet, or approximately 5 seconds while traveling 50 mph. Portions of the proposed substation will also be visible from the existing 350 foot wide transmission corridor located west of the substation. Most motorists and pedestrians who travel on this road regularly expect to see the existing transmission lines and the Surowiec Substation.

Additional Mitigation

CMP has proposed mitigation measures to minimize the visual impact to motorists, pedestrians, and abutting residential homes on Fickett Road, which include (1) siting the substation within an area that requires minimal additional clearing, (2) the preservation and maintenance of existing non-capable and capable woody vegetation along the south side of Fickett Road adjacent to the substation site, and (3) a buffer planting plan to be prepared and submitted to MDEP. The buffer planting plan has been developed using a mixture of native hardy deciduous and coniferous plant species that are tolerant of wet soils. The plant species specified will mature to be similar in height to the tallest substation components of approximately 60 feet. The proposed buffer plantings will also reduce the visibility of the existing Surowiec Substation and transmission lines that are currently visible from Fickett Road.

Enclosures

cc: James Beyer, MDEP;
Jay Clement, USACE;
Samantha Horn, LUPC;
Bill Hinkel, LUPC;
Naomi Kirk-Lawlor, LUPC;
Christopher Lawrence, USDOE;
Melissa Pauley, USDOE;
Bernardo Escudero, CMP;
Gerry J. Mirabile, CMP
Mark Goodwin, Burns & McDonnell;
Matt Manahan, Pierce Atwood;
Jared des Rosiers, Pierce Atwood

121 West Main Street, Yarmouth, ME 04096 207.846.0757 www.TJD&A.net