

APPENDIX E
CASE 10-T-0189
REVISED DEVIATION ZONE JUSTIFICATION



Explanation for Proposed Deviation in Segment 1

On March 30, 2010, Champlain Hudson Power Express, Inc. (now CHPE LLC and CHPE Properties, Inc.) (collectively the "Certificate Holders") filed an Application for a Certificate of Environmental Compatibility and Public Need ("Certificate") with the New York State Public Service Commission ("PSC") pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the transmission project known as the Champlain Hudson Power Express Project (the "Facility") (PSC Case 10-T-0139). The PSC issued a Certificate for the Project on April 18, 2013, which adopted the terms of a Joint Proposal and associated Certificate Conditions.

The Facility route, as depicted on a series of maps included as Appendix B of the Joint Proposal and as amended, consists of a nominal centerline (the "Centerline") and an Allowed Deviation Zone ("ADZ"). Those portions of the ADZ that are ultimately determined to be actually affected by construction of the Facility, as well as certain areas outside the ADZ that are needed temporarily for site investigation, access, and construction, are referred to as the Construction Zone. When the Facility is completed, the Certificate Holders will have either control of-via fee, easement, or other appropriate interest-or rights granted by a governmental authority to use such authority's permanent right-of-way ("ROW"), and certain adjacent areas as defined in Certificate Condition #5, which states:

The portions of the Allowed Deviation Zone to be occupied by the Facility once construction is complete are referred to herein as the Facility ROW. The Certificate Holder shall also acquire and maintain the continuing right to enter onto and use certain additional lands immediately adjacent to the Facility ROW needed for repair and maintenance purposes, including preclusion of vegetative encroachment, on terms prohibiting the owners of such land from taking any action on that land that would interfere with such repair and maintenance activities.

The Certificate Conditions require that, should cable installation work be proposed outside of the ADZ, an explanation for the proposed deviations must be provided pursuant to Certificate Condition 157. Provided those certain criteria are met, Condition 157 of the Certificate confers discretion on the Public Service Commission to approve, the Environmental Management Construction Plan ("EM&CP") filings which include "deviations from the design depth, height, and location of facilities or structures." Specifically, Condition 157 states that deviations "shall be allowed for appropriate environmental or engineering reasons without modification to [the] Certificate, except where a conflict with a specific provision of this Certificate would be created." The purpose of this memorandum is to demonstrate the appropriate environmental and engineering reasons for the proposed modification to the Deviation Zone in Segment 1, and to show that the deviation creates no conflict with the other Certificate Conditions.



As part of the EM&CP filing for the first overland segment, the Certificate Holders are proposing minor work which will be outside of the ADZ associated with the Lake Road Horizontal Directional Drilling (HDD) Crossing. This memorandum provides the required supporting materials necessary for DPS staff to review and approve this minor deviation as part of the EM&CP process. Specifically, this includes:

1. A detailed description of and justification for the ADZ exceedance based upon appropriate environmental and engineering reasons, including a demonstration that the exceedance is limited to the minimum extent necessary.
2. Confirmation that Certificate Holders have obtained rights to occupy and use the land(s) associated with any such ADZ exceedances (Exceedance Area) and the consent of any and all landowners owning any part of the Exceedance Area to the occupancy and use of their land(s) for Facility purposes and are in the process of recording those rights with the appropriate County office.
3. A demonstration that any net incremental environmental impacts arising as a result of the construction, operation, and maintenance of the Facility in the Exceedance Area are not material.
4. A demonstration that installation of the Facility cables in the Exceedance Area will not substantially change the location of Facility components or structures and does not otherwise conflict with the other Certificate Conditions.

1. Description of the Exceedance Area

The proposed Lake Road HDD Crossing is located in the Town of Putnam, Washington County, beginning near Station 10145+00 and extends to Station 10154+00 (see Figure 1). The proposed HDD begins approximately 0.26 miles east of State Route (SR) 22, and its length extends approximately 900 feet. HDD entry will be approximately 25 feet south of the Lake Road ROW. The proposed HDD will avoid Stream CS13 (Mill Brook NYSDEC C(T)) and NWI R2UBH, which flows through an existing culvert at station 10149+00. Boring locations within the Lake Road HDD include PD-7A at Station 10148+00 and PD-7 at Station 10149+00. There are also proposed 80' x 20' entry and exit work zones for the HDD as shown on the Plan and Profiles included with the EM&CP.

Pursuant to Condition 138, each EM&CP filing must include a "detailed map or maps showing... the anticipated ultimate location and boundary of the Facility ROW". A detailed map showing the location and boundary of the Exceedance Area and ultimate Facility ROW is included as Figure 1



as well as depicted in the EM&CP Plan and Profile drawings. The total area proposed outside of the ADZ is approximately 28,780 square feet for the permanent easement and 44,100 square feet for a temporary easement (see Figure 1), including temporary work (less than one acre) within agricultural (pasture) areas.

Justification

The Certificate Holders have endeavored to keep the Facility located within the currently approved ADZ and this exceedance is the only location where the Facility is outside the ADZ for Segments 1 and 2. However, certain physical limitations and obstacles have resulted in necessary shifts in the Facility location at Lake Road as described herein and within the Segment 1 and 2 EM&CP. This change is a minor shift of the proposed Lake Road HDD Crossing. The alternative to this exceedance is to impact a stream and adjacent wetlands, as there is no room for an HDD within the road ROW. The following information was used to determine a shift outside the ADZ was necessary:

- (1) Weak soils - A geotechnical analysis indicated that soils dictated that the HDD pathway be increased in depth to prevent potential impacts to the wetlands and stream by inadvertent returns of drilling fluids.
- (2) The lengthening of the pathway and the existing curvature of Lake Road in this location forced both ends of each HDD bore path to be outside of the ADZ.

The use of this area outside the ADZ will also aid Certificate Holders in minimizing impacts to traffic during this HDD installation, by keeping the HDD work area outside of Lake Road itself.

Land Control

CHPE, LLC has secured an option agreement with the owners of both parcels of land outside of the ADZ. This agreement is in the process of being recorded and will be converted into a permanent easement prior to construction. The recorded option agreement will be provided under separate cover to DPS Staff.



Environmental Impact

The anticipated ADZ exceedance constitutes a minor change; environmental impacts will be minimized, and the overall character of the Facility will not be changed. A detailed impact review and a summary of environmental considerations are provided below.

Agricultural Resources

Portions of the currently proposed Lake Road HDD Crossing are within an active agricultural area (i.e., pasture). As such, the Certificate Holders have commenced the process of conducting the necessary agricultural consultations required under Certificate Condition 76 with both the landowner and New York State Department of Agriculture and Markets (Ag & Mkts)(see Appendices A and B). Although a permanent easement will be established with the landowner on the agricultural land, the landowner will be allowed to continue use of this land for agricultural purposes. Therefore, the project impacts for installation of the transmission cables will be temporary, except for minor permanent impacts of approximately 10 square feet associated with the manhole risers from the vault. Total temporary impacts associated with construction access, two HDD pits, and portions of open trenching are approximately 34,694 square feet (0.79 acre). The agricultural soils will be stripped, stockpiled and returned to the HDD pits and trenches to re-establish existing grades and to preserve the agricultural value of the impact area. All disturbed areas will be returned to pre-existing conditions in accordance with the BMPs established in the EM&CP for agricultural land impacts. As a result of the very limited impact area and implementation of agricultural BMPs to protect the integrity of the agricultural land/soils, there will be no significant impacts to the agricultural land or current operations. The Lake Road HDD Crossing will comply with the following, as shown on the Plan and Profile drawings dated included in the EM&CP.

- The Certificate Holders have provided the owners with a telephone number to facilitate direct contact between the owners and the Agricultural Inspector(s).
- Construction entrances and access roads will be matted for temporary access and mats shall be layered where necessary to provide a level access surface.
- In areas where matting is not feasible or practicable, topsoil stripping will be performed. For access area and work area installation and topsoil stripping, an



underlayment of durable, geotextile fabric will be placed over the exposed subsoil surface prior to the use of temporary gravel access fill material. All areas will be restored to pre-existing grades following construction.

- The Certificate Holders shall provide a monitoring and remediation period of two (2) years following completion of Construction Zone restoration in active agricultural areas.
- The Certificate Holders shall retain the services of the Agricultural Inspector through this period. The monitoring and remediation phase shall be used to identify any remaining agricultural impacts associated with construction of the Facility that are in need of mitigation and to implement the follow-up restoration. During the monitoring and remediation period, onsite monitoring shall be conducted at least three times during each growing season.
- The Certificate Holders shall maintain temporary fencing and restore any permanent fencing impacted during construction.
- Where applicable, restoration practices will be postponed until favorable (workable, relatively dry) topsoil/subsoil conditions exist. Restoration will not be conducted while soils are in a wet or plastic state. Stockpiled topsoil will not be re-graded until plasticity, as determined by the Atterberg field test, is significantly reduced. No Facility restoration activities will occur in agricultural fields in the months of October through May unless DPS Staff has determined after consultation with Ag & Mkts that favorable soil moisture conditions exist. The Certificate Holder will monitor and advise Ag & Mkts and DPS Staff regarding tentative restoration planning.

Adherence to these best management practice will minimize and avoid long-term impacts to agricultural land, consistent with the findings of the Article VII Certificate Order.

Archaeological Resources

There are no known archaeological sites located within the currently proposed Lake Road HDD Crossing work area. The Lake Road HDD Crossing work area is located outside of the area previously reviewed and tested for archaeological resources. The Cultural



Resources Management Plan provided in EM&CP Appendix O recommends that this area be monitored for archaeological resources during construction due to the small area of impact.

Terrestrial Ecology

The shifting of the route at the Lake Road HDD Crossing will not result in additional impacts to terrestrial ecology. As discussed above, the original route at this location at Lake Road was primarily located within road right-of-way and/or active agricultural land. The proposed work is now primarily within the agricultural field where more habitat is available for wildlife, although limited by the active use of the land. This property is primarily pasture that is in active use. However, wildlife will use this land for foraging. The impact area is very small and will be returned to existing conditions upon completion of the cable installation. As a result, these temporary impacts will have no significant impacts on wildlife. Additionally, with the BMPs discussed below, potential impacts to State and federally listed rare, threatened, and endangered (RTE) species will be avoided. Similarly, the currently proposed HDD work area is primarily within agricultural land; thus, adverse impacts to ecological habitats will be avoided.

Threatened and Endangered Species

The shifted route at the Lake Road HDD Crossing will not result in any changes to the Facility's impacts on federally listed or state-listed species or habitat. Although the project will shift from the disturbed roadway that provides no habitat for most species to the agricultural field, no significant impacts to any of the previously identified and currently updated list of State and federally listed RTE species are anticipated. The land is currently used for pasture and is in active use. The potential habitat of concern within this general area includes trees that may support roosting bats during the summer and potential foraging area for the timber rattlesnake. Impact avoidance measures for potential affects are provided in Chapter 8 of the Segment 1 and 2 EM&CP, which includes the use of exclusion fence and monitoring by a trained biologist, licensed to handle herpetofauna, within the project corridor. These BMPs will exclude the snake from the work area, preventing impacts to this species should it be present/transient during construction. Additionally, the removal of trees, if necessary, will be limited and will occur during the winter months when the bats are in hibernation.



Wetlands and Streams

The change in the proposed work area is necessary to avoid impact to a delineated and evaluated stream. The proposed HDD that will require incursion into the adjacent agricultural land to avoid impacts to a State regulated stream and associated federally regulated wetland. The work area designated for the HDD pits were selected to remain outside of the stream and wetland areas. This area has been completely evaluated and delineated.

Conclusion

The adjusted route at the Lake Road HDD Crossing presented above does not significantly increase adverse environmental impacts. Impacts associated with this work have been minimized and mitigated and can be addressed by the Certificate Conditions already approved by the Commission for the Facility. The deviation requested is necessary for appropriate engineering and environmental reasons and does not conflict with the other Certificate Conditions.

On that basis, the Certificate Holders respectfully request that DPS Staff approve this deviation from the ADZ with the Segment 1 and 2 EM&CP without modification to the Certificate.

