STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of New York on March 16, 2005

COMMISSIONERS PRESENT:

William M. Flynn, Chairman
Thomas J. Dunleavy
Leonard A. Weiss
Neal N. Galvin

CASE 03-T-0644 - Application of Niagara Mohawk Power Corporation for a Certificate of Environmental Compatibility and Public Need for the Construction of a 345 kV Electric Transmission Line, Approximately 8.1 Miles Long, in the City of Rensselaer and the Towns of East and North Greenbush, Rensselaer County.

ORDER ADOPTING THE TERMS OF A JOINT PROPOSAL AND GRANTING CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

(Issued and Effective March 16, 2005)

BY THE COMMISSION:

INTRODUCTION

Procedural History

On April 28, 2003, Niagara Mohawk Power Corporation (Niagara Mohawk) applied, pursuant to Public Service Law Article VII, for a certificate of environmental compatibility and public need for a major electric transmission facility. The company proposed to construct and operate a 345 kV transmission facility to connect the Empire State Newsprint Project, proposed to be constructed in the City of Rensselaer, to the electric grid at the Reynolds Road Substation in North Greenbush.

On July 14, 2003, the presiding officer assigned to this case conducted a public statement hearing in Rensselaer at which four persons commented on the proposal. On July 15, 2003, he conducted a preliminary conference which set the case schedule and identified the active parties. Evidentiary

route. Also, an existing circuit will be removed and re-routed to the Greenbush Substation. The new transmission line will be located on the cleared portions of the vacated right-of-way. It consists of four segments.

Segment 1 begins at the switch yard of the major electric generating facility being constructed by the Besicorp-Empire Development Company in the City of Rensselaer. The transmission line will travel south along an existing, 100-foot wide Niagara Mohawk right-of-way into the Town of East Greenbush, a distance of about 1.9 miles. On this segment, the facility will be placed on steel monopole structures approximately 150 feet in height, in a double-circuit configuration with a relocated existing 115 kV circuit (Circuit # 16).

Segment 2 travels easterly along an existing 250-foot wide Niagara Mohawk right-of-way in the Town of East Greenbush, a distance of approximately 2.1 miles. The Segment 2 facility will be placed on single-circuit, steel H-frame structures, on average about 100 feet tall.

Construction activity on Segment 2A includes the relocation of two existing 115 kV circuits (Circuits # 16 and 17) a distance of about 0.67 miles to terminate them at the Niagara Mohawk Greenbush Substation. The relocated circuitry on this segment will be placed on double-circuit, steel monopole structures between 80 and 90 feet in height.

Segment 3 begins in the Town of East Greenbush and travels north along an existing 355-foot wide right-of-way into the Town of North Greenbush to the Reynolds Road Substation, a distance of about 4.1 miles. On this segment, the facility will be placed on steel H-frame structures on average 100 feet in height. They will replace existing wood pole H-frame structures.

The potential impact on agricultural land is limited. The proposed route passes only one area in East Greenbush where agricultural land is in active use. At this location, the route is aligned to the edge of the field and an existing access road on the right-of-way will be used during construction. Construction activity will be scheduled to mitigate disruptions to agricultural cultivation. If disruptions cannot be avoided compensation will be provided.

Where the facility passes through residential areas, much of the land adjacent to the right-of-way is undeveloped or rural in character. By following existing rights-of-way, the facility will have minimal impacts on the residential areas.

Suburban residential areas exist along the transmission line route in the Town of East Greenbush in the area of Stock Lane, Route 151, and Old Red Mill Road. The facility will introduce taller structures in these areas; however, some of the existing structures will be removed and the essential character of the land use on the right-of-way will remain unchanged. Niagara Mohawk will identify, in its environmental management and construction plan (EM&CP), the specific mitigation measures it will use to minimize disruptions in the residential areas.

The facility also passes by commercial establishments and industry at three locations. Mitigation measures will be used to minimize the disturbances due to construction. Access to the local businesses will be preserved at all times.

The view of the facility was analyzed using visual simulations and representative locations. Potential adverse impacts, and the probable nature of the visual impact of the proposed facility, were assessed. Sensitive visual locations were identified. Along the proposed route, there are five structures that are listed on the state and national register of historical places, two state bicycle routes, and a designated coastal zone on the Hudson River. Nine other visually sensitive locations are within a mile of the proposed transmission line; however, the facility will not be perceptible from most of them.

Segment 1 is within the Hudson River Coastal Zone. The facility runs close to the Papscanee Marsh in East Greenbush but avoids it. The facility will cross the Papscanee Creek. Construction activity will be performed on the existing right-of-way, using an available access road, to avoid impacts to the riparian ecosystem and to minimize the amount of clearing.

The New York Department of State has reviewed the proposed facility for its consistency with coastal zone policies and has determined that it is in harmony with the State's Coastal Management Program.

Segment 1, and a small portion of Segment 2, is in the Hudson River floodplain. Segment 3 crosses a floodplain associated with Mill Creek. The facility will not alter the prevailing flood storage conditions in these areas.

The facility will also cross several streams but none of them are protected resources. Construction will affect a small amount of wetlands. Niagara Mohawk has applied to the U.S. Army Corps of Engineers for a permit to conduct construction activity in the wetland areas. Access to the wetlands will be limited and activity will be restricted to protect this resource.

Three types of vegetative communities exist in the rights-of-way: successional old field, successional shrubland, and forested areas. The areas that are disturbed during construction will be restored. Following construction, vegetation maintenance practices will be used to return the old field, shrubland and forest areas to their current state. Within the right-of-way security zone, some forested areas will be permanently cleared, but only to the extent necessary. No long-term impacts to wildlife are anticipated. No threatened or endangered species were observed in the vicinity of the proposed facility.

The soil and geological conditions on the rights-of-way do not present any conditions calling for unconventional construction methods. Niagara Mohawk's EM&CP will contain the prevention and mitigation measures needed to minimize impacts to soils and geology. Original contours will be re-established in

the substations. The maximum electric field strength at these locations is within the rating standards the Commission established in 1978.[2] The electric field levels at the substations are expected to be similar to those currently present at the substations.

The magnetic fields from the transmission line and the substations are expected to be within the rating standard the Commission set in 1990.[3] By placing the transmission line close to the center of the right-of-way in Segment 2, the distance is increased between the line and the nearest residences adjacent to the right-of-way. This will reduce the magnetic field level at the nearest residential structures.

Alternatives

The Joint Proposal states why the facility is preferable to various alternatives. In general, it uses existing rights-of-way, and avoids or minimizes the land use impacts and disturbances to the natural habitat that other routes and configurations would have. A 345 kV transmission line is preferable to a 230 kV line, or multiple 115 kV lines, given the limited availability of rights-of-way and the efficiency reductions that would occur from using lower voltage lines. A "no build" alternative was also considered and rejected because the transmission line is needed to connect a new generation facility to the bulk power grid.

Underground cable configurations were also considered and rejected due to their substantial cost, estimated between $22.9 and $26.1 million. Given the overhead line's limited incremental impacts, the parties to the Joint Proposal concur that a costly underground line cable is not warranted.

The Joint Proposal supports the route to the Reynolds Road Substation in North Greenbush rather than an alternate route to the New Scotland Substation in Albany County. The route to North Greenbush avoids a Hudson River crossing; it also runs a shorter distance and is less costly.

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[2] Joint Proposal, ¶24.

[3] Joint Proposal, ¶26.

technology. Nonetheless, to mitigate the adverse visual impacts, Niagara Mohawk will evaluate the use of some screening at public crossings that does not conflict with the management of the right-of-way. The company's EM&CP will address this matter and the Commission will determine whether any such screening measures should be implemented.

Waiver of Commission Regulations

On April 28, 2003, Niagara Mohawk requested a waiver of certain regulations requiring that information be provided with the company's application. The Joint Proposal reports that Niagara Mohawk has withdrawn all but one such request.

With respect to the archaeological information required by 16 NYCRR §86.3(a)(1)(iii), the company will provide it to the State Office of Parks, Recreation and Historic Preservation but will not release the information to the public in order to protect the archaeological resources.

Right-of-Way Acquisitions

To construct and operate the facility, Niagara Mohawk must acquire permanent rights-of-way and some temporary rights-of-way on parcels adjoining the existing rights-of-way.

Permanent acquisitions are required at the intersection of Segments 1 and 2 (consisting of 27,000 square feet), and at a point near the beginning of Segment 1 where a 100-foot wide easement is needed to cross Riverside Avenue and the Albany Port District's property. Niagara Mohawk must also amend its agreements for a 345 kV transmission line to cross the CSX Transportation, Inc. railroad track in Segment 1 and the Amtrak railroad tracks in Segment 2.

Niagara Mohawk also requires temporary rights-of-way for Segment 1 construction activity in an area along Teller Road and at the intersection of Riverside Avenue and the Port Access Highway. It will temporarily relocate an electric circuit (Circuit #16) while constructing the new facility. Three off-right-of-way access easements are also needed for Segments 2 and 3.

Rensselaer County

The Rensselaer County Environmental Management Council has entered into the Joint Proposal and considers it to be acceptable. The County agency would have preferred that the portion of the transmission line close to residential areas be placed underground. However, it believes that the terms of the Joint Proposal will ensure that the project does not adversely impact either local residents or the environment.

DISCUSSION AND STATUTORY DETERMINATIONS

The Joint Proposal submitted to us on December 23, 2004 has been endorsed by many of the formal parties that represent state interests and local government interests in this proceeding. None of them oppose the proposed terms and provisions that contain significant environmental protections and substantially reduce the environmental impacts associated with Niagara Mohawk's original proposal in this case. During the evidentiary hearings held in October and November 2003, the original proposal was seriously challenged by the Department of Public Service Staff. Staff's evaluation of the first proposal identified the visual, community and aesthetic impacts of large concern here.

Given the evidentiary hearing results, the parties entered into good faith settlement discussions to consider ways to further reduce and mitigate the proposal's potential impacts. The successful results of the settlement negotiations were presented to the public in April 2004 and a public statement hearing was held in June 2004. Recently, we have received additional written comments that are entirely consistent with those obtained at the June 2004 hearing.

The public comments continue to show that the placement of a new 345 kV transmission facility between the City of Rensselaer and the Town of North Greenbush will impose local impacts. For that reason, we must determine in this case, among other things, whether the facility, as currently proposed, represents the minimum adverse environmental impacts considering all relevant factors, including the state of technology and the nature and economics of the available alternatives. As

fields at the edge of the rights-of-way, at occupied structures and at the substations are minimized.[4]

Turning to the visual, community and aesthetic impacts of concern to the local residents and their representatives, we find that Niagara Mohawk has addressed and minimized the adverse impacts associated with its original proposal.

In their settlement negotiations, the parties thoroughly considered each transmission facility segment and they devised an approach for Segments 2 and 3 to minimize the impacts from placing a 345 kV transmission facility in the established rights-of-way. On these segments, the use of steel monopole structures (in the range of 130 feet tall) has been largely avoided. Such structures will only be used where they are necessary in Segments 1 and 2A. Existing, wooden H-frame structures will be removed from a portion of Segment 2 and all of Segment 3 to make room for the steel, H-frame structures that better match the height of the existing transmission facilities in the rights-of-way. This approach, as reflected in the Joint Proposal, retains the character of the existing rights-of-way, as much as possible, in their current condition. It avoids further congestion on the rights-of-way and it reduces the height of the new transmission facility by about 35 feet. These results minimize the local impacts and we find that they are entirely reasonable and appropriate.

Addressing the public comments favoring the installation of an underground facility, this alternative was duly considered on the record made in this case. Niagara Mohawk's April 2003 application addressed it; undergrounding was also evaluated by DPS Staff.[5] We find that the route and configuration modifications that were made to Niagara Mohawk's original proposal (as reflected in the Joint Proposal) represent the minimum adverse environmental impacts, considering the available technology and the economics of the other alternatives. Consequently, the record in this instance does

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[4] See, DPS Staff's Statement in Support, pp. 13-19,

[5] Id., pp. 41-44.

construction and operation of the State's bulk power network in the service territory for which the company is responsible.

Accordingly, we find and determine that:

1. The facility is necessary as an interconnection to deliver the energy output of the authorized 505 MW Besicorp-Empire Development Company, LLC, cogeneration power plant in the City of Rensselaer to the Niagara Mohawk Power Corporation bulk electric system.

2. The nature of the probable environmental impacts include: (a) minimal and temporary construction impacts on one field currently in active agricultural use; (b) incremental visual impacts on adjacent residential and commercial areas from somewhat larger structures; (c) visual impacts on adjacent industrial areas from the introduction of new, tall monopole structures; (d) construction impacts on a minor amount of wetlands; (e) forest clearing on some segments of the right-of-way; (f) some momentary traffic delays due to the delivery of materials and during the installation of conductors at road crossings; (g) occasional higher levels of noise due to construction activities; (h) electromagnetic fields within the standards prescribed by the Commission; and, (i) ordinary construction impacts on the right-of-way associated primarily with the construction activities necessary to install foundations, string the transmission line, and upgrade the substations.

3. The facility, as proposed by the parties, represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives examined, and other pertinent considerations such as the effects on agricultural lands, wetlands, visual impacts, and river corridors.

4. No part of the facility shall be located underground. There has been a considerable investigation of the potential for undergrounding alternatives. Undergrounding of the entire facility, and undergrounding of a partial segment of the facility, is uneconomic given the limited, incremental nature of the probable environmental impacts of the facility.

4. This proceeding is continued.

By the Commission,

(SIGNED) JACLYN A. BRILLING
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 03-T-0644 – Application of Niagara Mohawk Power Corporation for a Certificate of Environmental Compatibility and Public Need for the Construction of a 345 kV Electric Transmission Line, Approximately 8.1 Miles Long, in the City of Rensselaer and the Town of North Greenbush, Rensselaer County.

JOINT PROPOSAL

By:

Niagara Mohawk Power Corporation
Besicorp-Empire Development Company, LLC
Staff of the Department of Public Service
New York State Department of Environmental Conservation
New York State Department of Agriculture & Markets
Rensselaer County Environmental Management Council
City of Rensselaer

Dated: Albany, New York
December 21, 2004

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PUBLIC SERVICE COMMISSION

CASE 03-T-0644 – Application of Niagara Mohawk Power Corporation for a Certificate of Environmental Compatibility and Public Need for the Construction of a 345 kV Electric Transmission Line, Approximately 8.1 Miles Long, in the City of Rensselaer and the Town of North Greenbush, Rensselaer County.

JOINT PROPOSAL

THIS JOINT PROPOSAL is made on the 21st day of December, 2004 by and among Niagara Mohawk Power Corporation (Niagara Mohawk), Besicorp-Empire Development Company, LLC (BEDCO), Staff of the Department of Public Service (Staff), New York State Department of Environmental Conservation (DEC), New York State Department of Agriculture & Markets (Ag&Mkts), Rensselaer County Environmental Management Council, and the City of Rensselaer (collectively referred to as the "Signatory Parties").

Introduction

On April 28, 2003, Niagara Mohawk filed an application with the New York State Public Service Commission (Commission) seeking a certificate of environmental compatibility and public need pursuant to Article VII of the Public Service Law for the construction and operation of a 345 kV electric transmission line from the site of BEDCO's proposed major electric generating facility ("power plant") in the City of Rensselaer, running overhead a distance of approximately 8.1 miles through the City of Rensselaer, Town of East Greenbush and Town of North Greenbush, to Niagara Mohawk's Reynolds Road Substation in the Town of North Greenbush, all in Rensselaer County, New York (the "Facility").

Public statement hearings were held before Administrative Law Judge William Bouteiller in the City of Rensselaer, New York, on July 14, 2003. A preliminary conference was held on July 15, 2003 before Administrative Law Judge Bouteiller in Albany which was attended by the Signatory Parties. Evidentiary hearings were held on October 29, 30, 31 and November 13, 2003. A site viewing of the proposed routes was held on December 9, 2003. An additional public statement hearing was held before Administrative Law Judge Bouteiller in the Town of East Greenbush, New York, on June 24, 2004. In addition to the ordinary published notice, DPS Staff provided direct mail notification of the additional

and none of the positions taken herein by any party may be referred to, cited or relied upon in any fashion as precedent or otherwise in any other proceeding before this Commission or any other regulatory agency or before any court of law for any purpose, except in furtherance of ensuring the effectuation of the purposes and results of this Joint Proposal.

The Signatory Parties agree to submit this Joint Proposal to the Commission along with a request that the Commission expeditiously adopt the terms and provisions of this Joint Proposal as set forth herein.

The Signatory Parties recognize that certain provisions of this Joint Proposal contemplate actions to be taken in the future to effectuate fully this Joint Proposal. Accordingly, the Signatory Parties agree to cooperate with each other in good faith in taking such actions.

In the event of any disagreement over the interpretation of this Joint Proposal or implementation of any of the provisions of this Joint Proposal, which cannot be resolved informally among the Signatory Parties, such disagreement shall be resolved in the following manner: (a) the Signatory Parties shall promptly convene a conference and in good faith attempt to resolve any such disagreement; and (b) if any such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter.

This Joint Proposal shall not constitute a waiver by Niagara Mohawk of any rights it may otherwise have to apply for additional or modified permits, approvals or certificates from the Commission, DEC, or any other agency in accordance with relevant provisions of law.

This Joint Proposal is being executed in counterpart originals, and shall be binding on each Signatory Party when the counterparts have been executed.

Niagara Mohawk agrees to provide the necessary testimony and affidavits that will permit the supplemental exhibits agreed upon by the Signatory Parties set forth in Appendix A to be admitted as record evidence in this proceeding.

B. *Cost*

The following simplified cost comparison is provided for the major configuration alternatives considered by the Signatory Parties:

Configuration	Cost
345 kV Overhead Single Circuit to Reynolds Road (mainly H-frame) with re-route of Circuit # 17*	$11.2 million
345 kV Overhead Single Circuit to Reynolds Road	$14.9 million
345 kV Overhead Single Circuit to Reynolds Road (mainly H-frame) with re-route of Circuit # 17 and underground Segment near Stock Lane	$15 - 16 million
345 kV Overhead Double Circuit to Reynolds Road	$17.2 million
345 kV Overhead Single Circuit to New Scotland	$19.1 million
345 kV Underground Broadway/Greenway to Reynolds Road	$34.1 - 37.3 million
345 kV Underground Aiken/Route 43 to Reynolds Road	$34.3 - 37.1 million
230 kV Overhead Single Circuit to Reynolds Road	$40.5 million

* Denotes Joint Proposal Recommendation

- clearing of trees along Segment 3 will be minimized due to a shift of the alignment approximately 75 feet to the east[1];
- reduced visibility through use of shorter steel H-frame structures (average height of 100 feet in the Joint Proposal versus average height of 130 feet in the Application);
- reduced visibility due to replacement of existing Circuit #17 structures, rather than construction of an additional set of structures; and
- maintenance of the same profile of structures (replacing wood H-frame with steel H-frame) on the existing alignment.

(c) A landscaping and lighting plan for the Reynolds Road Substation will be developed that will provide for replacement of overgrown plantings, removal of danger trees, an assessment of views of the Reynolds Road Substation from Route 4 and Blooming Grove Drive, and an identification of appropriate mitigation opportunities for implementation without compromising the security or safety of the station. The plan will take into consideration clearance and access requirements for operation and maintenance of electrical facilities. The plan will be filed with DPS prior to initiation of construction activities at the Reynolds Road Substation. The lighting plan will describe the need for any additional lighting, to be installed at the Substation in the area where expansion activities will occur, and replacement of existing lighting. All lighting will be of the type that will allow visibility inside the station and will be directed to reduce the amount of direct light diffused to the area outside the station.

(d) Concerns about the potential for adverse visual impacts on nearby parks or at the Facility crossings of roads that serve as designated bikeways have been significantly mitigated by the use of lower, H-Frame structures where possible, and replacement of existing transmission facilities as designed.

Cultural Resources

5. A comprehensive cultural resources investigation for the Facility was conducted. This consisted of a Phase I cultural resource survey of rights-of-way followed by the Facility, and where

[1] Niagara Mohawk has recently completed an updated ROW Management Program (Transmission Line Right-of-Way Management Program, revised April 2003). The Facility will not affect any future ROW maintenance carried out on this ROW under the new management program.

significant coastal fish and wildlife habitat within Papscanee Marsh and Creek in the Town of East Greenbush. The Facility avoids the placement of any structures within Papscanee Marsh and will use an existing right-of-way and access road to cross the Papscanee Creek. Construction via this road will avoid and/or minimize the amount of clearing required and avoid related impacts to the riparian ecosystem proximate to the road and the right-of-way. The New York State Department of State (NYSDOS) reviewed the Facility for consistency with New York's coastal zone policies. NYSDOS has concurred that the Facility is consistent with the New York State Coastal Management Program.

Floodplains

10. Segment 1 of the Facility and a small portion of Segment 2 are located in the floodplain of the Hudson River. Segment 3 crosses a floodplain associated with Mill Creek. The configuration of the Facility will not result in any alteration of flood storage since no enclosed structures are proposed and foundation construction will occur below the ground surface.

Streams & Wetlands

11. The Facility crosses a limited number of streams, none of which are protected pursuant to DEC jurisdiction. A minor amount of wetlands will be affected by construction. The Applicant has applied to the U.S. Army Corps of Engineers for an individual permit to allow it to construct the Facility in wetlands areas. If available and practical, alternate access from off-right-of-way ingress/egress points will be used and the stream or wetland will be designated as either "No Equipment Access" or "Limited Vehicular Access" in the EM&CP. If an area cannot be avoided then the types of activities allowed adjacent to streams or wetlands will be restricted to minimize rutting or associated impacts. Typical protection measures include:

- confining vehicles (other than clearing and specialized equipment) to improved access roads and structure work pads;
- placing erosion controls such as hay bale/silt fence barriers along the edge of access roads and work areas;
- no deposition of off-site fill or slash within wetland areas, other than "drop and lop" clearing of tall-growing vegetation within wooded wetlands;
- no accumulation of construction debris;

development of a project-specific EM&CP Plan which will detail measures that will be implemented during construction to avoid or minimize impacts. Typical measures that could be implemented include:

- minimizing construction disturbance by use of existing right-of-way to the extent possible;
- timing construction to avoid sensitive breeding season for the least bittern;
- restrict construction activities in areas of known occurrence (none are known at this time);
- use of appropriate erosion control and best management practices during construction; and
- stabilize and re-vegetate disturbed areas with a seed mix that includes appropriate species, as practicable.

14. Maintenance practices following restoration on the right-of-way will allow natural re-vegetation of the right-of-way with low-growing shrubs and small trees to stabilize the surface. Unauthorized access by off road vehicles will be deterred with obstructions, such as boulders, shot-rock berms or locked gates at access points.

Geology, Soils & Erosion

15. None of the soil or geologic conditions encountered along the Facility route presents any engineering or construction issues that cannot be addressed through conventional construction methods. The Facility crosses twenty-four soil survey map units and five surficial geology units. The depth to bedrock is variable and depends on topography and overburden sediments. Construction and maintenance activities will disturb soils and bedrock within the right-of-way. Localized erosion, rutting, and compacting of soils will result from the movement of heavy equipment, clearing, and access road construction. The project-specific EM&CP will include prevention and mitigation measures to minimize impacts to soils and geology. In most areas, original surface contours will be re-established. Restoration measures proposed in the project-specific EM&CP will take into consideration the predominance of shallow soils which can hinder rapid re-growth and stabilization of construction areas. A Stormwater Pollution Prevention Plan for construction of the Facility will be developed with the project-specific EM&CP to ensure that potential erosion and sedimentation impacts are minimized.

heavy equipment or blasting will be of a temporary nature. During inclement weather the Facility will emit operational noise that will be noticeable within the right-of-way due to the effects of corona on the conductor and facilities. Buildings in close proximity to the Facility, generally within 300 feet, may experience some temporary disturbance due to audible noise during construction activities. Mitigation measures to minimize disruption to residential areas will be addressed in the EM&CP. Typical measures include:

- marking the edge of workspace to keep construction vehicles on the ROW;
- limiting construction to daylight hours;
- use of mufflers on construction equipment and limited idling of equipment at the construction site;
- having an Environmental Inspector on hand to anticipate any concerns of residents; and
- providing a community liaison to address concerns of residents.

20. Where solid rock is encountered, either ripping or hammering equipment will be used to remove the rock. If required, blasting will be employed to the required depth using the minimum charge required to break up the rock. A project-specific blasting plan will be tailored from existing Niagara Mohawk standards to include powder charges, blasting mats, noise, notifications, and cleanup of rock and debris criteria. The objective will be to minimize noise and vibration disturbances where blasting must be conducted near noise-sensitive sites.

21. Niagara Mohawk will comply with Chapter 131 of the Code of the City of Rensselaer which restricts noise associated with construction activities to between the hours of 6:00 A.M. and 9:00 P.M., except under emergency conditions. Niagara Mohawk will also comply with Subsection 4.207 of the Town of East Greenbush which prohibits excavations that create objectionable noise. Excavations associated with the construction of the Facility structures will be done in compliance with Best Management Practices to avoid objectionable noise.

directly adjacent to the right-of-way if new structures are sited in a manner that blocks the line-of-sight of the antennae on the cell tower. New structures should not be sited in a manner that blocks the line-of-sight of the antennae on the cell tower.

Electric and Magnetic Fields (EMFs)

24. Electric fields will emanate from the transmission line and substation improvements that constitute the proposed Facility. Computer simulations were used to calculate the expected electric field levels at the edge of the right-of-way of the transmission line, at the occupied structures nearest to the transmission line, and in the vicinity of the affected substations. For the transmission line, maximum electric field levels calculated at the right-of-way edge ranged from 0.1 kV/m for the Segment 2A connector, to 1.3 kV/m for Segment 2. Maximum electric field levels calculated at the nearest occupied structure ranged from <0.1 kV/m on the Segment 2A connector, to 1.4 kV/m at a commercial structure on Segment 3. The highest level at a residential structure (residence on Stock Lane) was 0.42 kV/m. For the Reynolds Road Substation, the maximum calculated electric field levels are projected to be about 0.025 to 0.125 kV/m in the areas surrounding the substation after the proposed expansion. The maximum calculated electric field levels are projected to be about 0.010 to 0.050 kV/m in the areas surrounding the Greenbush Substation after the proposed modifications. For both substations, the calculated electric field levels are similar in magnitude to existing electric field levels already present outside of the substations. All of the maximum calculated levels of electric field strength are lower than the 1.6 kV/m winter normal conductor rating standard established by the Commission in 1978 as an interim standard.

25. Magnetic fields will emanate from the transmission line and substation improvements that constitute the proposed Facility. Computer simulations were used to calculate the expected magnetic field levels at the edge of the right-of-way of the transmission line, at the occupied structures nearest to the transmission line, and in the vicinity of the affected substations.

26. Using the Commission's "winter normal conductor rating" methodology for the transmission line, maximum magnetic field levels calculated at the right-of-way edge ranged from 84.4

possible to the 345 kV (and as far away from the right-of-way boundary as possible) while keeping the aesthetics of the double circuit structures. Segment 2 (as modified by the Joint Proposal) adds a single circuit horizontal 345 kV two-pole H-frame structure to the existing right-of-way. Placing the centerline of the proposed 345 kV transmission line as close to the existing transmission circuits as possible and orienting the phases to provide the lowest magnetic field levels on the eastern right-of-way boundary have achieved EMF minimization. The Segment 2A Connector replaces a single circuit delta 115 kV configuration with a double circuit vertical 115 kV monopole structure. EMF minimization has been achieved by orienting the Feura Bush - Greenbush Circuit #17 phases opposite to the existing Greenbush Circuit #16 115 kV transmission line phases (reverse phase configuration). Segment 2A replaces a double circuit vertical 115 kV lattice tower structure between the Segment 2A Connector and Greenbush substation with a double circuit vertical 115 kV monopole structure. The lattice tower currently supports the Riverside - Reynolds Road Circuit #4 transmission line in a split circuit configuration. The existing circuits are not reverse phase configured. The new 115 kV monopole will support the relocated Feura Bush - Greenbush Circuit #17 on the west circuit position and the Riverside - Reynolds Road Circuit #4 circuit on the east circuit position, thus achieving EMF minimization by orienting the Feura Bush - Greenbush #17 and the Riverside - Reynolds Road Circuit #4 phases opposite (reverse phase configuration) to the existing Reynolds Road - Greenbush Circuit #9 split circuit transmission line on the East boundary of the right-of-way. Segment 3 adds a single circuit horizontal 345 H-frame structure to the existing ROW, replacing existing 230 kV H-frame structures. Placing the centerline of the proposed 345 kV transmission line close to the existing transmission centerline and orienting the phases to provide the lowest magnetic field levels on the eastern right-of-way boundary have achieved EMF minimization.

D. *The Availability and Impact of Alternatives*

The Application, supplemental application materials, exhibits and supplemental exhibits to be supplied for the record describe the availability and impact of alternatives to the Facility and are briefly summarized below. The Signatory Parties agree that the Facility as located and configured for this Joint Proposal is preferable, on balance considering all factors, to any of the alternatives considered, including the undergrounding alternatives. The selected route and configuration is preferred because it makes extensive use of existing rights-of-way, avoids or minimizes land use impacts and the disturbance

Alternative Configurations

4. The Signatory Parties considered and rejected a 345 kV double circuit configuration. The second 345 kV circuit is not needed to accommodate the electrical output of BEDCO's proposed major electric generating facility and is not otherwise needed at this time to reinforce New York's bulk transmission grid. In addition, a 345 kV double circuit configuration would require additional structures including the use of taller and more visually obtrusive monopoles throughout Segments 2 and 3, and would result in significantly more disturbance of natural habitat and the need for significant clearing of forest cover vegetation. In addition, such a configuration would increase the cost of the Facility by $6 million.

5. The Signatory Parties considered and rejected a 345 kV single circuit configuration that did not include the re-routing and replacement of part of Circuit #17. This configuration would also require the use of taller and more visually obtrusive monopoles throughout Segment 3, and would result in significantly more disturbance of natural habitat and the need for significant clearing of forest cover vegetation. In addition, such a configuration would increase the cost of the Facility by $3.7 million.

Undergrounding Considerations

6. The Signatory Parties considered and rejected an underground configuration using the Broadway/Greenway Route (6.7 miles long). Two basic cable types which could be used for a 345 kV alternating current system were evaluated; high pressure fluid filled (HPFF) pipe type cable, and cross linked polyethylene (XLPE), a solid dielectric cable. The parties assumed that a two-cable configuration would be used for either HPFF or XLPE. A single HPFF cable cannot carry the total power plant output. A single XLPE cable might carry the total plant output, however, for reliability purposes a two-cable configuration was assumed. This alternative would increase the cost of the Facility threefold, an increase of between $22.9 - 26.1 million. Construction would require the linear disturbance of public streets and the potential for interference with existing underground utility and drainage structures. Upon devising the collaborative design for the Facility as located and configured for this Joint Proposal, the Signatory Parties agreed that the now limited incremental physical and visual impacts did not warrant further consideration of such a costly undergrounding alternative.

residences in the area. Options for landscaping these views would be limited. Placing a small segment of the Facility underground increases the costs and design complexity. The underground construction cost for this 4,600 linear feet of the Facility is estimated at $4.3 to $5.3 million, depending on underground cable type. The displaced 4,600 linear feet of overhead line is estimated to cost approximately $550,000, therefore the net cost of the alternative would be $3.7 to $4.7 million. Finally, there are several existing transmission lines within the area that minimize the visual advantage of placing this segment of the proposed Facility underground, especially at such a high cost.

10. At the public statement hearing, concerns were expressed about the level of magnetic fields at the nearby homes in the Stock Lane area. As a result of a further review of alternatives to reduce magnetic fields to address these concerns, the Signatory Parties have proposed the placement of the proposed 345 kV transmission line closer to the center of the right-of-way to increase the distance from the nearest residence on Segment 2 resulting in a reduction in the highest magnetic field level at the two nearest residential structures (residences on Stock Lane). In addition, the Signatory Parties considered and rejected five other options that were studied. The rejected options included (a) a centerline adjustment [merely moves level of fields from one side of the right-of-way to the other side – where nearby residences are located on both sides]; (b) taller poles/conductor realignments [somewhat lower fields negated by significant adverse visual impacts]; (c) double (split) circuit with reverse phasing [much lower fields negated by very significant adverse visual impacts]; (d) passive cancellation loops [somewhat lower fields negated by significant adverse visual impacts including additional clearing and many additional structures and equipment]; and (e) active shielding [lower fields but difficult to predict, negated by significant adverse visual impacts including additional clearing and many additional structures and equipment].

E. *Conformance to Long-Range Plans*

The Facility does not violate any long-range plans, is consistent with the most recent State Energy Plan ("SEP") (2002), and does not adversely impact the electrical system.

F. *System Reliability Impact Studies*

There are a number of reliability benefits which will result from operation of the Facility. The Facility will enable the BEDCO power plant to interconnect with the Niagara Mohawk bulk electric

G. ***State and Local Laws***

New York State Uniform Fire Prevention and Building Code

1. Niagara Mohawk agrees to undergo building plan review and obtain building permits (when required), inspections, and certificates of occupancy upon the inspection and completion of construction from the City of Rensselaer, Town of East Greenbush and Town of North Greenbush, respectively, for the portions of the Facility to be constructed in each respective jurisdiction to the degree that the subject matter of the New York State Uniform Fire Prevention and Building Code applies to the Facility. The Signatory Parties agree that if Niagara Mohawk voluntarily follows such a course of action, not as an impermissible delegation or transfer of authority from the Commission under 19 NYCRR, § 1204.13, but as the exercise of each respective municipality under its own independent authority that it would normally exercise but for Section 172(1) of the Public Service Law, the record in this proceeding supports a finding under 168(2)(d) that the Facility is designed to operate in compliance with applicable state laws, and regulations issued there-under, concerning the New York State Uniform Fire Prevention and Building Code.

City of Rensselaer Zoning Regulations § 179-15 – Height Regulations

2. In the City of Rensselaer, the route of the Facility must necessarily pass through the "I" zoning district to reach the site of the proposed major electric generating facility. The height of structures within the "I" zoning district are generally limited to 70 feet with certain specified exceptions (*e.g.*, radio and television towers). The maximum allowed height under the exceptions would be 87.5 feet. The structures for the Facility in this location need to be 140 to 160 feet high. Given the width of the existing Right-of-way in this location and the proximity of surrounding land uses (*e.g.*, railroad and oil tank farms), the height or location of the structures cannot be modified based on engineering constraints. There is a minimum clearance requirement for the conductors based on the National Electric Safety Code (NESC) and an additional need to provide adequate clearance to assure compliance with the Commission's criteria on electric and magnetic fields (EMFs). Undergrounding of the facility is not a feasible alternative (as discussed elsewhere in this Joint Proposal) and would not generally be warranted as this area is heavily industrial in character. The likely purpose of the height restriction is to preserve visual uniformity

at all Facility crossings of public rights-of-way that does not conflict with its right-of-way management standards and shall implement appropriate screening measures as determined by the Commission.

H. ***Real Property Considerations***

1. Need has been demonstrated in this proceeding for the acquisition of additional permanent right-of-way, temporary right-of-way or off-right-of-way access easement on lands adjoining the existing right-of-way as set forth below in this section of this Joint Proposal.

Permanent Right-of-Way

2. At the intersection of Segment 1 and Segment 2 there is a need to expand the existing right-of-way to make room for the Facility which out of necessity must cut across the corner of two adjacent parcels. The area to be acquired by Niagara Mohawk consists of approximately 27,000 square feet of land on an existing access lane and a forested area of an adjacent parcel on the easterly side of the railroad tracks.

3. At the Segment 1 crossing of the CSX Transportation, Inc. railroad track and at the Segment 2 crossing of the Amtrack railroad tracks, there is a need to amend the current Niagara Mohawk agreements relative to crossing these tracks. The current agreements authorize crossing with a transmission line with a voltage of 115 kV. Amendments or new agreements are required to authorize crossing with the Facility at a voltage of 345 kV.

4. At a point near the beginning of Segment 1 where it will be necessary to relocate existing Circuit #16, there is a need to obtain 100-foot wide easements to cross the Albany Port District Commission property and to cross Riverside Avenue. The easements (or in the case of the City of Rensselaer, a revocable consent if that is all that can be granted) to be acquired by Niagara Mohawk consist of approximately 3,500 square feet of land on the property of the Albany Port District Commission and 5,000 square feet of land of the City of Rensselaer in the right-of-way of Riverside Avenue.

Temporary Right-of-Way

5. In the area of Segment 1 along Teller Road, constraints due to the location of existing structures and other facilities warrant the temporary re-location of existing Circuit #16 to an alignment off

to provide access to Segment 3 from Temple Lane. The proposed Corellis Access Easement is necessary to provide access to Segment 2 from State Routes 9 & 20. The proposed Worthman Lane Access Easement is necessary to provide access to Segment 2 from Worthman Lane. The record will be supplemented with a new exhibit depicting the proposed access easements.

IV. Proposed Findings

The Signatory Parties agree that the record in this proceeding supports the proposed findings set forth in Appendix C attached hereto.

V. Ordering Clauses/Certificate Conditions

The Signatory Parties agree that the proposed ordering clauses/certificate conditions set forth in Appendix D attached hereto are acceptable and appropriate for inclusion in a certificate authorizing construction and operation of the proposed Facility as reconfigured herein.

VI. EM&CP Guidelines

The Signatory Parties agree that the General Guidelines for Environmental Management and Construction Plan(s) set forth in Appendix E attached hereto are acceptable and appropriate for application to the proposed Facility as reconfigured herein.

VII. Water Quality Certification

The Signatory Parties agree that the record in this proceeding supports the proposed water quality certification set forth in Appendix F attached hereto.

IN WITNESS WHEREOF, the Parties hereto have this day signed and executed this Joint Proposal.

Besicorp-Empire Development Company, LLC

IN WITNESS WHEREOF, the Parties hereto have this day signed and executed this Joint Proposal.

12-21-04

New York State Department of Environmental Conservation

By: Mark D. Sanza, Esq.

IN WITNESS WHEREOF, the Parties hereto have this day signed and executed this Joint Proposal.

Dated – December 22, 2004

Rensselaer County Environmental Management Council

Jason Kippen

Appendix D to Joint Proposal

PROPOSED ORDERING CLAUSES/CERTIFICATE CONDITIONS

The Commission orders:

1. Subject to the conditions set forth in this Opinion and Order, Niagara Mohawk Power Corporation (Niagara Mohawk) is granted a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of an approximately 8.1 mile long 345 kV transmission line and related facilities (the "Transmission Facility") extending from the take-off structure at the switch yard on the site of the major electric generating facility proposed by Besicorp-Empire Development Company, LLC ("Besicorp") located at Riverside Avenue, City of Rensselaer, Rensselaer County, New York to the Niagara Mohawk Reynolds Road substation (the "Interconnection Facility"), located in the Town of North Greenbush, Rensselaer County, New York.

2. Niagara Mohawk shall, within 30 days after the issuance of the Certificate, submit to the Commission either a petition for rehearing or a verified statement that it accepts and will comply with the Certificate. Failure to comply with this condition shall invalidate the Certificate.

3. If construction of the Transmission Facility hereby certified is not commenced within 18 months, this certificate may be vacated with notice to the Certificate Holder and Besicorp.

Description of Route and Facilities

4. The proposed location of the Transmission Facility is approved as described in Appendix B of the Joint Proposal dated December 21, 2004 (the "Joint Proposal").

Laws and Regulations

5. a) Niagara Mohawk's motion for a waiver of the application requirements of 16 NYCRR Section 86.3(a)(1)(iii) is granted. Niagara Mohawk's motion for waivers of other application requirements is withdrawn as unnecessary given the drawings submitted.

b) Each substantive Federal, State and local law, regulation, code and ordinance applicable to the Transmission Facility authorized by the Certificate shall apply, except any substantive local law or regulation which the Public Service Commission ("Commission") has refused to apply as being unreasonably restrictive as discussed herein.

c) The following provisions of the Code of the City of Rensselaer have been found by the Commission to be unreasonably restrictive and shall be inapplicable to the Transmission Facility:

Zoning Regulations §179-15 - Height Regulation; and

Zoning Regulations §179-33 - Required Screening.

d) No State or local legal provision purporting to require any approval, consent, permit, certificate or other condition for the construction or operation of the Transmission Facility authorized by the Certificate shall apply, except (i) those of the Public Service Law and regulations and orders adopted thereunder, (ii) those provided by otherwise applicable State law for the protection of employees engaged in the construction and operation of the facilities, (iii) those permits issued under a federally delegated environmental permitting program, and (iv) those referenced in Conditions 6, 16 and 56 below.

e) Niagara Mohawk shall construct the Transmission Facility in a manner that conforms to all standards of the American National Standards Institute (ANSI) including, without

c) To minimize EMFs for the Segment 2A Connector, the Feura Bush - Greenbush Circuit #17 phases shall be oriented opposite to the existing Greenbush Circuit #16 115 kV transmission line phases (reverse phase configuration).

d) To minimize EMFs for Segment 2A, the Feura Bush - Greenbush #17 and the Riverside - Reynolds Road Circuit #4 phases shall be oriented opposite to the existing Reynolds Road - Greenbush Circuit #9 split circuit transmission line on the East boundary of the right-of-way (reverse phase configuration).

e) To minimize EMFs for Segment 3, the centerline of the proposed 345 kV transmission line shall be placed close to the existing transmission centerline and the phases shall be oriented to provide the lowest magnetic field levels on the eastern right-of-way boundary.

11. Construction work within 200 feet of occupied structures shall take place between 7:00 a.m. and 6:00 p.m. daily. Nighttime and weekend construction activities may be necessary to coordinate utility outages for the convenience of the residents and businesses. For certain construction phases and activities, additional work hours may be necessary. Nothing herein shall preclude Niagara Mohawk from making the necessary arrangements for the extension of work hours with appropriate local agencies in compliance with local ordinances. Noise mitigation procedures shall follow those set forth in the approved Environmental Management and Construction Plan ("EM&CP"). DPS Staff shall be notified at least 48 hours in advance if planned weekend, evening or holiday construction becomes necessary. This condition is not intended to prohibit nighttime construction reasonably necessary to comply with restrictions on daytime construction on or along roadways or public access areas, or to require the cessation of construction activities, which require a continuous work effort once started.

12. Niagara Mohawk shall keep local fire department and emergency management teams apprised of chemicals and waste on site. All chemicals and waste shall be secured in a locked and controlled area.

13. Niagara Mohawk shall take appropriate measures as outlined in the EM&CP to minimize fugitive dust and airborne debris from construction activity.

14. Facility construction worker parking shall be in designated areas which do not interfere with normal traffic and do not cause any safety hazard or interfere with existing land uses. These parking areas shall be designated in the EM&CP.

15. Niagara Mohawk shall periodically consult with State and local highway transportation agencies about traffic conditions near the project site, and shall make good faith efforts to minimize the impact of the construction of the Transmission Facility on local traffic circulation.

16. To the extent required in connection with the delivery of oversized components, Niagara Mohawk or its suppliers shall obtain any necessary permits from the local or State agencies.

17. (a) Niagara Mohawk shall engineer and construct its facilities to be fully compatible with the operation and maintenance of nearby electric, gas, telecommunication, water, sewer, and related facilities; details of such other facilities and measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP. The Transmission Facility shall be designed and constructed to avoid adverse effects on the cathodic protection system and physical conditions of existing structures; and any fuel gas pipelines within the right-of-way of the Transmission Facility. Niagara Mohawk shall provide a plan indicating the details and design of measures to protect nearby facilities and structures. Plans shall detail appropriate measures to mitigate: pipeline induced voltages and currents for both steady state and fault conditions, based on assessments to avoid pipe wall and coating damage, corrosion, and hazards to personnel; induced voltages and personnel protection at tank farm area; and inductive interference to railroad signaling and communications facilities; or other conditions as identified in site-specific analysis of the certificated right-of-way during preparation of the EM&CP. Appropriate mitigation measures including grounding, upgrade of existing protection devices or

Appendix D to Joint Proposal

Environmental Management and Construction Plan

21. Except where this Certificate requires otherwise, the environmental protection measures contained in the Application, Wetland Mitigation Supplement for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line and Natural Gas Pipeline, dated February 27, 2004, Permit Application to the US Army Corps of Engineers for the 345 kV Transmission Line, dated July 2003, Supplemental Analysis, 401 Water Quality Certification, and in the Joint Proposal (to the extent adopted in this Certificate), shall be incorporated into the EM&CP. The EM&CP shall be prepared in accordance with the EM&CP guidelines attached as Appendix E to the Joint Proposal. These measures shall be applied during construction, operation and maintenance of the certified Transmission Facility. Applicable provisions of the Certificate, EM&CP, and orders approving the EM&CP shall be accommodated in any design, construction, ownership or maintenance contracts associated with the Transmission Facility.

22. Niagara Mohawk shall provide, as a part of the EM&CP:

(a) a final design plan that reflects conformance of the Transmission Facility design with the Commission Certificate, applicable Federal, State, and local requirements (including, but not limited to, applicable regulations, including those of the Bureau of Alcohol, Tobacco and Firearms, Occupational Safety and Health Administration, NYS Department of Labor, the Uniform New York State Fire Prevention and Building Code, chemical and waste-storage use and handling regulations);

(b) a discussion of the status of efforts by Niagara Mohawk to obtain permits necessary for project construction from State and local agencies, Federal agencies (USACOE, et.al.); and

(c) the Interconnection Agreement for the generation facility and the certified Transmission Facility.

23. Niagara Mohawk shall not begin site preparation or construction with respect to any portion of the Transmission Facility (except for surveying, soils testing and such other related activities as are necessary to prepare final design plans) and shall not commence any proceedings under the Eminent Domain Procedure Law (EDPL) to acquire permanent right-of-way, temporary right-of-way, or off-right-of-way access before it has submitted to the Commission, and the parties identified in clause 24, below, and the Commission has approved, an EM&CP for the relevant portion of the Project.

24. Niagara Mohawk shall submit four copies of the EM&CP to the Commission, serve two copies on the Staff of the New York State Department of Environmental Conservation ("DEC"), one copy on the Region 4 office of the DEC, one copy on the Commissioner of the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), one copy on the Staff of the New York State Department of Agriculture and Markets (NYSA&M), one copy on the Region 1 office of the NYSDOT; one copy on any other New York State agency (and its relevant regional offices) which requests the document; and one copy on active parties on the service list who request the document. Niagara Mohawk shall also place copies for inspection by the public in at least one public library or other convenient location in each municipality in which construction will take place. Contemporaneously with the submission and service of the EM&CP, Niagara Mohawk shall provide notice, in the manner specified below, that the EM&CP has been filed.

25. (a) Niagara Mohawk shall serve written notice(s) of filing the EM&CP on all active parties to this proceeding, on each person on the Commission's service list considered potentially affected by the subject matter in the EM&CP, and on all statutory parties to this proceeding, and shall attach a copy of the notice to each copy of the EM&CP. Further, Niagara Mohawk shall publish the notice(s) in a newspaper or newspapers of general circulation in the vicinity of the Transmission Facility. (b) For all permanent right-of-way, temporary right-of-way, or off-right-of-way access to be acquired for the Transmission Facility, Niagara Mohawk shall cause an examination of title (title search) to be conducted in the same manner as would be

29. (a) Deviations from the certified centerline, as reasonably necessary, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a provision of the Joint Proposal or the Order would be created. An explanation for the deviation shall be provided with supporting documentation in the EM&CP.

(b) Deviations from the design height and location of structures shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a provision of the Order would be created. An explanation for the proposed deviation shall be provided with supporting documentation in the EM&CP.

30. (a) At least two weeks prior to the start of construction, Niagara Mohawk shall hold a preconstruction meeting. An agenda, location and attendee list shall be agreed upon between DPS Staff and Niagara Mohawk.

(b) Niagara Mohawk shall supply draft minutes from this meeting to all attendees, the attendees may offer corrections or comments and Niagara Mohawk shall issue the finalized meeting minutes to all attendees.

(c) If, for any reason, the construction contractor cannot finish the construction of this project, and a new construction contractor is needed, there will be another preconstruction meeting with the same format as outlined above.

Notices and Public Complaints

31. (a) Niagara Mohawk shall make available to the public a toll free or local phone number of an agent or employee where complaints may be received during the construction of the certified facilities. In addition, the phone number of the Secretary, and the phone number of the Commission's Environmental Compliance Section, shall also be provided.

(b) Niagara Mohawk shall report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so, or within 30 days after receipt of the complaint (whichever comes first).

32. (a) No less than two weeks before commencing site preparation, Niagara Mohawk shall:

(1) provide notice to local officials and emergency personnel;

(2) provide such notice for dissemination to local media and display in public places (such as general stores, post offices, community centers and conspicuous community bulletin boards).

(b) The notice shall contain:

(1) a map and a description of the Transmission Facility in the local area;

(2) the anticipated date for start of construction;

(3) the name, address and local or toll- free telephone number of an employee or agent of Niagara Mohawk;

(4) a statement that the project is under the jurisdiction of the New York State Public Service Commission, which is responsible for enforcing compliance with environmental and construction conditions, and which may be contacted at an address and telephone number to be provided in the notice;

(5) where possible, the notice will be written in language reasonably understandable to the average person.

(c) Upon distribution, a copy shall be submitted to the Secretary of the Commission, and to DEC Staff.

Appendix D to Joint Proposal

Right-of-Way, Construction, Maintenance and Restoration

38. Niagara Mohawk shall confine construction and subsequent maintenance to the certified right-of-way, and approved additional work areas, as detailed in the EM&CP. Construction shall not commence on any segment of the Transmission Facility until Niagara Mohawk has obtained such permanent right-of-way, temporary right-of-way, or off-right-of-way access (whether obtained through a conveyance or by the filing of a condemnation order and acquisition map) as are necessary for such construction for such segment. Prior to the commencement of the re-location of existing Circuit #16 onto a temporary right-of-way, should such temporary re-location be necessary, copies of the easements for the temporary re-location of existing Circuit #16 shall be provided to the Commission. The easements shall depict property rights, clearing rights, access rights, and such other matters as appropriate to address the site and environmental conditions and property interests of affected landowners and relevant conditions and requirements of the EM&CP. The duration of temporary occupancy of the easement locations shall be specified. Specifications for removal of all temporary transmission facilities including wires poles and structures shall also be indicated.

39. Before electric line construction begins, both edges of the electric right-of-way and the outside edges of the danger tree zones shall be delineated and marked. Also, Niagara Mohawk shall stake and flag all off-right-of-way access road easements and extra workroom areas.

40. Neither Niagara Mohawk nor any contractors in its employ shall clear or alter any areas outside the boundaries of the certified Transmission Facility, except as necessary, upon prior notice to affected landowners, to remove designated danger trees as defined and delineated in the EM&CP.

41. (a) All merchantable logs resulting from clearing the right-of-way for this Transmission Facility shall be removed from the right-of-way, unless otherwise noted on the construction drawings and approved by DPS Staff;

(b) All non-merchantable woody debris resulting from clearing the right-of-way for this Transmission Facility shall be chipped, unless noted on the EM&CP and approved by DPS Staff, or removed from the right-of-way. No chips shall be stored in wetlands, active agricultural fields, or within 50 feet of streams or drainages.

(c) Niagara Mohawk shall prepare a plan for removal, reuse, recycling and disposal of equipment; existing transmission facility components replaced as part of construction of this Transmission Facility shall be removed from the Niagara Mohawk right-of-way to appropriate destinations and handled appropriately for re-use as available based on conditions (wood poles, conductors, etc.).

(d) Niagara Mohawk will seek, if necessary, a beneficial use determination from the New York State Department of Environmental Conservation ("DEC") for proposed re-use of any treated wood poles for uses other than as structures for support of conductors for the transmission or distribution of utility service.

42. All trees over two inches diameter breast height (DBH) or shrubs over four feet in height damaged or destroyed by activities during construction, operation, or maintenance, regardless of where located, shall be replaced within the following year by Niagara Mohawk with the equivalent type trees or shrubs, except if:

(a) permitted by the approved EM&CP;

(b) equivalent-type replacement trees or shrubs would interfere with the proper clearing, construction, operations, or maintenance of the certified Transmission Facility;

(c) replacement would be contrary to sound right-of-way management practices, or to any approved long-range right-of-way management plan applicable to the Transmission Facility or adjoining transmission facilities; or

50. Niagara Mohawk shall submit to the Commission for approval, and provide a copy to any party so requesting, a long-term right-of-way management plan for the Transmission Facility. The plan shall:

(a) contain a list of residential areas and environmentally significant features (including as a minimum any stream-crossings, wetlands, vegetation planting areas, important wildlife habitats, parks, officially-designated trails and visual screens) and provisions to minimize maintenance impacts on those areas and features;

(b) contain a vegetation and land-use inventory for the first and each subsequent treatment (the vegetation inventory shall include the right-of- way location, vegetation type, height, density and treatment technique);

(c) contain a list of potential undesirable right-of-way uses (e.g., trash dumping, trespass or encroachment) and policy to remedy or control such uses;

(d) describe the treatment techniques and chemicals proposed for use, and limit chemical use to approved usages and dosages; and

(e) describe a Niagara Mohawk policy on surveillance, posting and installation of deterrents to adverse access;

(f) describe Transmission Facility management including Transmission Facility monitoring, patrols, marking and maintenance of facilities, coordination of activities with underlying landowners or land managers, and maintenance of erosion control features, access roads, landscape plantings and vegetation; and

(g) describe how the Transmission Facility maintenance and management is integrated into applicable Niagara Mohawk system-wide management plans.

51. Within ten days of the completion of final restoration, Niagara Mohawk shall notify the Commission that all restoration has been completed in compliance with this Certificate and the EM&CP.

Environmental Supervision

52. Niagara Mohawk shall designate a full-time supervisor, inspector and environmental monitor with stop work authority over all aspects of this project; the supervisor shall be on site during all phases of construction and restoration. The environmental monitor(s) and construction inspector(s) shall be equipped with sufficient documentation, transportation and communication equipment to effectively monitor contractor compliance with the provisions of this Order, applicable sections of the Public Service Law, § 401 Water Quality Certification, and the EM&CP. The name and qualifications of the supervisor, inspectors and environmental monitor(s) shall be submitted to DPS Staff at least two weeks prior to the start of construction.

53. The authority granted in the Certificate and any subsequent order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such order(s):

(a) Niagara Mohawk shall regard DPS Staff representatives (certified pursuant to Public Service Law Section 8) as the Commission's designated representatives in the field; In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of the Certificate or any other order in this proceeding, such DPS Staff representatives may issue a stop-work order for that location or activity;

(b) A stop-work order shall expire in 24 hours unless confirmed by a single Commissioner; If a stop-work order is confirmed, Niagara Mohawk may seek reconsideration from the confirming Commissioner or the whole Commission; If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or the

Appendix D to Joint Proposal

Roads and Highways

55. In preparing the EM&CP, Niagara Mohawk shall consult with each transportation department or agency normally having jurisdiction over any roads in the project vicinity that will be crossed by the certified facilities, or used for direct access to the Transmission Facility right-of- way. If the access road takes direct access from, or lies within the limits of such roads, Niagara Mohawk shall notify each such transportation department or agency of the approximate date work will begin.

56. (a) All work within State Highway rights-of-way shall be performed according to the traffic and safety standard and other requirements contained in 17 NYCRR Part 131, entitled *Accommodation of Utilities Within State Highway Right-of-Way.*

(b) The detailed manner of State highway crossings shall be coordinated with the appropriate Regional DOT authority, and the information responding to the requirements of 17 NYCRR Part 131 shall be included in the EM&CP. If Niagara Mohawk and the Regional DOT officials cannot agree on the details of work within a State Highway right-of-way, or if those officials fail to respond in a timely fashion, Niagara Mohawk shall notify the Commission in its EM&CP filing and describe fully the disagreements. Nothing in this paragraph alters the Commission jurisdiction pursuant to PSL Article VII.

Waterbodies and Wetlands

57. Niagara Mohawk shall minimize disruption to wetlands during Transmission Facility construction, operation and maintenance.

(a) Wetland locations shall be delineated in the field and indicated on the EM&CP drawings for the certified Transmission Facility, the right-of-way, and any off-right-of-way access roads or staging areas.

(b) Any activities which may affect wetlands shall be designed and controlled to minimize adverse impacts, giving due consideration to the environmental features and functions of the wetlands and the one hundred (100) foot adjacent area associated with any State regulated wetlands ("adjacent area").

(c) Niagara Mohawk shall, to the extent feasible, avoid direct impacts on wetlands and construct any new access roads outside any wetland, and outside the adjacent area associated with DEC regulated wetlands.

(d) Construction of any access roads through wetlands or adjacent areas shall be carried out using methods of construction set forth in the EM&CP for wetland impact minimization, including measures to assure that:

(1) any temporary gravel road or timber mat installations and associated work pad material shall be removed following construction;

(2) pre-disturbance flow regimes shall be maintained;

(3) the vegetative mat and wetland soil horizons shall be separated during excavation and replaced to as near the original position as possible during backfilling and restoration.

58. Niagara Mohawk shall minimize disruption to streams and rivers during Transmission Facility construction, operation and maintenance.

(a) For streams classified C(t) or higher, Niagara Mohawk shall conduct any in-stream construction only between May 15 and September 30. For all other streams that have warm water fisheries, construction shall be conducted only between July 15 and March 15.

(b) For all other streams, construction may be conducted at any time.

mitigation, restoration and clean up may include, but is not limited to, the following: full width topsoil stripping, removal of rock 4-inches or larger, importing of topsoil, surface and subsurface shattering, deep tillage, repair of functioning stone drainage systems, broken tile or tiling systems, installation of new intercept drains, and compensation for crop loss.

65. The EM&CP shall identify locations where Black Cherry trees are located on the right-of- way near active livestock use areas. During right-of-way clearing, black cherry vegetation shall be disposed of in a manner which prevents access by livestock.

66. Construction and restoration in active agricultural fields shall only be done when soil moisture conditions are suitable for construction equipment, as determined by the DPS Staff in consultation with NYSA&M staff and Niagara Mohawk.

67. The EM&CP shall provide details of agricultural lands including:

(a) identification of the location of all commercial sugar bushes maintained for maple syrup production within the right-of-way;

(b) demonstration that the centerline location avoids or minimizes impacts to commercial sugar bush operations;

(c) demonstration that the Transmission Facility minimizes or avoids active agricultural lands and minimizes impacts on normal agricultural operations or activities;

(d) specifications and drawings showing procedures and techniques to be implemented for agricultural drain line repairs;

(e) specifications for access from public roads to agricultural fields, including an under-layment of durable, geo-textile matting placed over the exposed subsoil surface prior to application of temporary gravel access fill material; specifications shall indicate complete removal of the ramp upon completion of the project and restoration of the impacted site prior to topsoil replacement.

68. Segments of fences and gates affected by construction shall be rebuilt to like-new condition upon completion of construction. The base of all new posts shall be secured to a reasonable depth below the surface to prevent frost heave.

69. Where repeated temporary access is necessary across agricultural portions of the right-of-way such that soil compaction or mixing may result, topsoil shall be removed including all of the "A" soil horizon down to the beginning of the subsoil "B" horizon, generally not to exceed a maximum of 12 inches. Topsoil removal up to a depth of 16 inches may be required in specially designated soils encountered along the route and identified in the EM&CP. All topsoil shall be stockpiled and separated from other excavated materials. The Agricultural or Environmental Specialist shall determine depth of topsoil stripping per affected farm during EM&CP development by means of the County Soil Survey and on- site soil auger sampling, if necessary. All topsoil material shall be stripped, stockpiled, and uniformly returned to restore the original soil profile. During the clearing/construction phase, site specific depths of topsoil stripping shall be monitored by the Agricultural or Environmental Specialist.

70. In agricultural areas of soil over bedrock, which requires blasting, Niagara Mohawk shall use matting or controlled blasting to limit the dispersion of blast rock fragments. All blasted rock not used as backfill shall be removed from croplands, hay lands and improved pastures. Subsoil and topsoil shall be returned in natural sequence to restore the soil profile. Farm owners/operators shall be given timely notice prior to blasting on farm property.

71. In all agricultural sections of the right-of-way where topsoil is stripped, Niagara Mohawk shall break up the exposed construction surface subsoil with deep tillage by such devices as a deep-ripper or heavy duty chisel plow. Following the deep ripping and chiseling, all stone and rock material four inches and larger in size which has been lifted to the surface shall be collected and taken off site for disposal. The topsoil that has been temporarily removed for the period of construction shall then be replaced. Finally, deep subsoil shattering

utilized during construction, operation or maintenance of this Transmission Facility. Niagara Mohawk shall immediately notify DEC of any spills.

Cultural Resources

78. Should archeological materials be encountered during construction, Niagara Mohawk shall stabilize the area and cease construction activities in the immediate vicinity of the find and protect the same from further damage. Within twenty-four hours of such discovery, Niagara Mohawk shall notify DPS Staff and OPRHP Field Services Bureau to determine the best course of action. No construction activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation has been determined.

79. Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be immediately halted and the remains shall be protected from further damage. Within twenty-four hours of any such discovery, Niagara Mohawk shall notify the DPS Staff and OPRHP Field Services Bureau. All archaeological or burial encounters and their handling shall be reported in the status reports required by Conditions 36 and 54 above.

80. Niagara Mohawk shall avoid adverse impacts on historic structures in the project vicinity by implementing facility location, design, and vegetation management measures described in the Application Supplement, Exhibit 18 plans, and measures to be specified in the EM&CP.

Other Requirements

81. Construction of the Transmission Facility shall not commence until the major electric generating facility proposed by Besicorp-Empire Development Company, LLC has received such permits and approvals as are necessary for it to be constructed pursuant to Article X and any Federal and State permit or licensing requirement.

82. Niagara Mohawk shall file with the Commission a copy of all facilities design studies for the Transmission Facility, including all updates.

83. Upon completion of construction at the Reynolds Road substation, Niagara Mohawk shall provide an assessment of station visibility, landscape condition, and mitigation needs. Views from public streets shall be assessed, and reports on vegetation condition and clearances from station fencing, conductors and other facilities shall be presented for Staff review. Landscape planting, drainage, grading and other mitigation needs shall be assessed and designs presented for addressing site restoration and long-term property and facility management.

84. Non-specular conductors shall be specified for installation for all new facilities and any replaced or modified transmission circuits affected by construction activity approved by this facility certification.

85. Niagara Mohawk shall consult with AT&T Longlines in the final construction design of Segment 3 and report the results of that consultation as part of the EM&CP. If Niagara Mohawk and the AT&T Longlines officials cannot agree on the details of work within the right-of-way, or if those officials fail to respond in a timely fashion, Niagara Mohawk shall notify the Commission in its EM&CP filing and describe fully the disagreements. Nothing in this paragraph alters the Commission jurisdiction pursuant to PSL Article VII.

86. Niagara Mohawk shall have a continuing obligation during the life of the Facility to respond promptly to complaints of any interference caused by the steel monopole structures of Segments 1 and 2 on the broadcast pattern of radio (AM) broadcast towers and amateur (ham) radio licensees. Upon receipt of any such complaint, Niagara Mohawk shall

Appendix E to Joint Proposal

GENERAL GUIDELINES FOR ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN(S)

The environmental management and construction plans (EM&CP), consisting of appropriate maps, charts, illustrations, and text, shall include, but need not be limited to, the following information.

A. Plan and Profile Details. A Line Profile[1] (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet)[2] showing:

1. Facility Location

a. The boundaries of any new, existing and/or expanded right-of-way (ROW)[3] or road boundaries if cables are to be constructed underground in streets; plus areas contiguous to the ROW or street within which the applicant will obtain additional rights; and an explanation of the need for those additional rights.

b. The location of each facility structure (showing its size, material and type and indicating the GSA—595A Federal standard color designation or manufacturers color specification to be used for painted structures), structural foundation, fence, gate, down-guy anchor, and any counterpoise (typical counterpoise drawings will suffice) required for the proposed facility; conductors, insulators and static wires and other components attached to facility structures.

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[1] The lowest conductor of an overhead design should be shown in relation to ground at the maximum permissible conductor temperature for which the line is designed to operate, i.e, normally the shorttime emergency loading temperature specified by the New York ISO. If a lesser conductor temperature is used for the line profile, the maximum sag increase between the conductor temperature and the maximum conductor temperature shall be indicated for each ruling span. For underground facility design, show relation of facility to final surface grade, indicating design depth-of-cover.

[2] Contour lines (preferably at 5-foot intervals) are desirable on the photostrip map if they can be added without obscuring the required information.

[3] The term "ROW" in these *Guidelines* includes property to be used for substations, disposal sites, underground terminals, storage yards, and other associated facilities. Where such properties cannot reasonably be shown on the same plan or photo-strip, maps or plan drawings used for the transmission line, additional maps or drawings at convenient scales should be used.

(i.e., chip; cut and pile; salvage merchantable timber, etc.). Designate methods for management of vegetation to be cut or removed at each site, indicating the rationale for the method designated. Sites should be based on an initial ROW vegetation inventory conducted prior to clearing and access road construction, and should be distinguished by criteria such as:

(1) any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods, or

(2) any geographical area bounded at each end by areas requiring distinctly different cut-vegetation methods due to site conditions such as land use differences, population density, habitat or site protection, soil or terrain conditions, fire hazards or other factors.

(3) different property-owners requesting specific vegetation treatment or disposal methods.

(4) delineation and protection of desirable vegetation species.

(5) indication of areas requiring (off-ROW) danger tree removal.

b. The location of any areas where specific tree protection measures will be employed to avoid damage to specimen trees, stands of desirable species, important screening trees or hedgerows. Details of specific measures should be specified in text and site plans.

3. Building and Structure Removals

Indicate the locations of any buildings or structures to be acquired, demolished, moved or removed. In text, provide the rationale for the acquisition and removal of buildings or structures.

4. Waterbodies

a. Indicate the name, water quality classification and location of all rivers and streams (whether perennial and intermittent) within 100 feet of, or crossed by, the proposed ROW or any off-ROW access road constructed, improved or maintained for this facility. Indicate the procedures that were followed to inventory such resources and provide copies of any resulting data sheets and summary reports. Describe the measures to be taken in each location to protect streambank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; timing restriction; and other site-specific measures appropriate

measures to be taken to reduce audible noise levels caused by either construction equipment or facility operation.

8. Other Environmentally Sensitive Areas

a. Indicate the general locations of any known ecologically and environmentally sensitive sites (including rare and endangered species or habitats, deer winter yards, and archaeological sites), within or nearby the proposed ROW or along the general alignment of any access roads to be constructed, improved or maintained for this facility. Indicate the procedures that were followed to identify such resources and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze such sites shall be made available to Staff upon request.

b. Indicate the location and identification of sensitive land uses and resources that may be affected by construction of the facilities or by construction-related traffic (i.e., hospitals, emergency services, sanctuaries, schools, residential areas, etc.). Specify measures to minimize impacts on these resources.

b. to avoid spills and improper storage or application in the vicinity of any wetland, river, creek, stream, lake, reservoir, spring, well or other ecologically sensitive site, or existing recreational area along the facility ROW and access roads.

(3) a schedule or projected dates of any seeding and/or planting.

(2) permanent installations (i.e., cut and fill earthen road, geotextile under-layment, gravel surface, paved surface, etc.);

(3) use of roads, driveways, farm lanes , rail beds, etc.;

(4) other access, such as helicopter or barge placement.

For each temporary and permanent access type provide a figure or diagram showing a typical installation (include top view, cross section and side view with appropriate distances and dimension). Where existing access ways will be used, indicate provisions for upgrading to meet appropriate standards.

c. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:

(1) staked hay bale or check dam (for ditches or stabilization of topsoil);

(2) broad-based dip or berm (for water diversion across the access road);

(3) roadside ditch with turnout and sediment trap;

(4) French drain;

(5) diversion ditch (water bar);

(6) culvert (including headwalls, aprons, etc.);

(7) sediment retention basin (for diverting out-fall of culvert or side ditch);

(8) silt fencing.

d. Indicate the type of stream crossing method to be used in conjunction with access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions) for each crossing device and rationale for their use. Stream crossing devices may include but not be limited to:

(1) ford (with or without gravel);

(2) ford with sill;

(3) timber mat;

(4) culverts including headwalls;

(5) bridges (either temporary or permanent).

8. ROW Management Plans

a. Describe the interim ROW vegetation management plan to be used for the proposed facility from the beginning of vegetative clearing until the comprehensive site-specific long-range ROW management plan is submitted. Include a description of the initial and follow-up vegetation treatment techniques; and the proposed contents of any post-construction and long-range ROW management plans. Such plans, when submitted, shall describe the goals and objectives and include supporting inventories and analyses, proposed and alternative techniques (including consideration of vegetative screening and buffer areas at locations such as stream crossings, public roadways, and residential areas), schedules, and other important environmental information deemed necessary.

b. Describe interim ROW management plans and standards for securing, stabilizing, monitoring and addressing ROW access roads, facility maintenance, and analysis of compliance with any post-restoration requirements.

9. Organization of Document

The document should include appropriate cross-references, indicating where the plan addresses specific requirements including:

a. These *Environmental Management and Construction Plan Guidelines*;

b. The Commission Article VII Certificate conditions and describing the procedures followed or that will be followed to comply with those requirements.

c. If any particular requirements of these documents are not applicable, so indicate.