

**Central Hudson Gas & Electric Corporation  
Preconstruction Notification**

**Nationwide General Permit No. 12  
Utility Line Activities**

**WM Transmission Line Rebuild**

**Town of Montgomery, Village of Walden,  
Village of Maybrook,  
Town of Hamptonburgh, Town of New Windsor  
Orange County, NY**



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## List of Attachments

Attachment 1	Indiana Bat and Bog Turtle Memorandum dated August 2, 2007
Attachment 2	Purple Milkweed Report dated June 29, 2007
Attachment 3	Environmental Management and Construction Plan (EM&CP)
Attachment 4	Determination of No Adverse Effect from New York State Office of Parks, Recreation and Historic Preservation dated February 8, 2008
Attachment 5	Wetlands Delineation Report, October 2007

## **1.0 PROJECT DESCRIPTION**

Central Hudson Gas & Electric Corporation (CHG&E) is proposing to rebuild an approximate 12 mile section of an existing 69 kilovolt (kV) transmission line in Orange County, New York from CHG&E's Rock Tavern Substation in the Town of New Windsor to its East Walden Substation in the Town of Montgomery.

### **1.1 Project Location**

The 69 kV transmission line is a combination of existing right-of-way (ROW) and new ROW locations. The Rock Tavern Substation is located west of the business center of the Town of New Windsor. The WM Line traverses agricultural land along State Route 208 and turns northwest into the Village of Maybrook through a residential development along Prospect Avenue and enters the Maybrook Substation. This segment of the WM Line is on existing ROW. There are several wetlands and waterbodies associated with tributaries to the Otter Kill along this portion of the WM Line.

The WM Line continues on existing ROW northwest out of the Maybrook Substation traversing agricultural fields, crosses Neeleytown Road and proceeds north along Beaver Dam Road crossing I-84. Approximately one mile north of the intersection of Neeleytown Road and Beaver Dam Road, the WM Line proceeds east and north on new ROW through agricultural fields. The Line traverses Goodwill Road and proceeds northwest into the Montgomery Substation. Wetlands and streams along this section of the WM Line are associated with Beaver Dam Brook and tributaries to the Wallkill River.

The WM Line proceeds north out of the Montgomery Substation along existing WM Line ROW through agricultural and forested land. The WM Line joins the Norfolk Southern Railroad ROW and enters the New York State Electric and Gas (NYSEG) tap in the Village of Walden. The wetlands and waterbodies from the Montgomery Substation to the NYSEG tap are associated with tributaries to the Wallkill River.

The WM Line proceeds north out of the NYSEG tap along the railroad for approximately one half mile and turns northeast onto new ROW through commercial and residential properties. The WM Line crosses Coldenham Road, Elm Street, and Edmunds Road through residential and commercial property. The line proceeds east through commercial property and through an orchard where it joins another CHG&E transmission line. From this intersection, the WM Line proceeds north on existing CHG&E ROW through agricultural fields and forested uplands and terminates at the East Walden Substation. The WM Line traverses several small wetlands and a tributary to Tin Brook between the NYSEG tap and the East Walden Substation.

### **1.2 Project Purpose**

The WM Line was installed more than sixty years ago, and many structures, conductors, and shield wires along the Line are in need of replacement. Additionally, there are areas of considerable residential growth in the Villages of Walden and Montgomery that have resulted in significant encroachment onto the transmission line ROW. CHG&E recognizes this as an opportunity to relocate the WM Line to eliminate encroachment and support underbuild for distribution to residential communities and, at the same time, install new equipment on a line badly in need of an upgrade. CHG&E anticipates significant growth in the southern section of Orange County and is responding by increasing system reliability in this area.

## **2.0 RARE AND ENDANGERED SPECIES**

The New York Field Office of the U.S. Fish and Wildlife Service (USFWS) publishes county-level information regarding the occurrence of federally protected species (USFWS, 2006). This list, last published in September 2006, indicates that the following federally protected species are known to occur in Orange County: one threatened species, the Bog turtle (*Clemmys muhlenbergii*), and three endangered species, including Dwarf wedge mussel (*Alasmidonta heterodon*), the summer population of Indiana bat (*Myotis sodalis*), and Shortnose sturgeon (*Acipenser brevirostrum*) (National Oceanic and Atmospheric Administration [NOAA] Fisheries has principal responsibility for the Shortnose sturgeon.) New York Natural Heritage Program (NYNHP) identifies one species, the Indiana bat, which may be found in the Project area. Please note that the bald eagle was originally listed as a threatened species but is no longer on the list; however, the bald eagle still receives protection under the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act.

Of these species, the Indiana Bat and Bog Turtle could be encountered within the Project area. The New York State Department of Environmental Conservation (NYSDEC) indicates that concerns regarding the Indiana Bat focus on destruction of roost trees, such as shagbark hickory and dead snags, during the clearing process (see Attachment 1 for the August 2, 2007 memorandum summarizing conversations with NYSDEC personnel). The NYSDEC also mentions that as long as those trees are removed between September 1<sup>st</sup> and March 31<sup>st</sup>, there should be no impacts to Indiana Bats, and adhering to this timeframe should suffice as mitigation. Regarding the Bog Turtle, NYSDEC advises that the use of standard wetland mitigation measures should suffice for mitigation measures (see Attachment 1).

At the request of George Profous of NYSDEC, a plant survey for Purple Milkweed was conducted in June 2007 (see Attachment 2). Although Purple Milkweed is not considered a rare, threatened or endangered species, New York State represents its northern habitat range. A small area was identified along the WM Line that contained three plants within the proposed ROW. The location of these plants is identified in the EM&CP (see Attachment 3). The Contractor will be instructed to flag the location in the field prior to the start of construction to ensure that equipment does not disturb the plants.

During construction of the Project, CHG&E will brief construction personnel on the sensitive biological resources that could occur in the Project area; the state and federal legislation that protect such species; and the importance of checking for, preserving, and protecting such species during construction activities.

## **3.0 CULTURAL RESOURCES**

Project construction techniques may involve ground-disturbing activities that have the potential to affect prehistoric or historically significant archeological resources. Much of the rebuild will occur on existing WM Line ROW which has been cleared of vegetation. Machines have accessed the area repeatedly for existing transmission line construction and maintenance for more than 60 years. There are approximately 2.8 miles of new ROW. One segment of new ROW traverses active and fallow agricultural lands, a new subdivision and an undeveloped institutional property between Beaver Dam Road and the Montgomery Substation in the Town of Montgomery. The other segment of new ROW is in the Village of Walden. This new ROW traverses residential and commercial properties, orchards, and agricultural fields to its junction with an existing CHG&E transmission line ROW.

Tetra Tech archeologists conducted a Phase 1A field walkover of the Project during the summer of 2007 to observe aboveground evidence for archeological sites such as foundations or artifact remains. Archeologists noted conditions such as steep slopes and ground disturbances that might

reduce archeological site preservation and sensitivity. As a result of this field work and a review of available documentation, a Phase 1A report was prepared and submitted to the New York State Office of Parks, Recreation and Historic Properties (OPRHP).

Tetra Tech and CHG&E met with the OPRHP to discuss the results of the Phase 1A survey. Phase 1B archeological testing was recommended for non-wetland, undisturbed landforms, where slopes are not severe (less than 12 percent slopes). Approximately 8 miles of Project ROW were recommended for Phase 1B testing. The Project also could involve visual impacts on properties listed on, or eligible for listing on, the National Register of Historic Places (NRHP).

Both a Phase 1B archeological survey and an architectural survey for the WM Line were submitted to the OPRHP in December 2007. Phase 1B archeological testing identified one prehistoric archeological site containing an argillite projectile point and one grey chert primary flake in an agricultural field south of Goodwill Road. The Phase 1B Archeological Investigation indicates that this site will be avoided during construction by use of an existing farm lane for access to the ROW. The Historic Architectural Resources Investigation identifies 8 buildings currently listed on the National Register of Historic Places (NRHP) and 10 potentially eligible for NRHP listing within the Project's visual area of potential effect (APE). The report concludes that the Project will not have an adverse effect on any of the listed or eligible properties within the APE. In a letter to CHG&E dated February 8, 2008 the OPRHP concurred that the Project will have no adverse effect on properties in or eligible for inclusion in the NRHP (see Attachment 4).

#### **4.0 WETLANDS AND WATERWAYS**

Tetra Tech conducted wetlands and waterbody delineations and habitat assessments for the Project during the fall of 2006 and summer of 2007 (see Attachment 5 for the Wetlands Delineation Report). Desktop information reviewed prior to field mobilization included USGS 7.5-minute topographic maps, NYSDEC Freshwater Wetland and Stream Maps, and National Wetland Inventory (NWI) Maps that were associated with the Project. Wetland and stream boundaries within the Project area were determined by field delineations. Tetra Tech surveyed the route covering a ROW width of 50 feet on either side of the centerline.

##### **4.1 Wetlands**

Field delineation methods used the Routine on Site Determination Method as described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) and the 1985 New York State Freshwater Wetlands Delineation Manual (Browne et al., 1995). This method incorporates a three-parameter approach using vegetation, soils, and hydrology to identify the presence of freshwater wetlands. Wetland boundaries were initially identified through visual assessment of vegetation and hydrology. This visual boundary was used to establish two sample points (one wetland point and one upland point) to verify the boundary of the wetland by analyzing dominant vegetation, soil classification, and hydrology at each sample point. Wetland boundaries were identified in the field with surveyor flagging, and the location of flagged boundary points were recorded using a Trimble<sup>®</sup> Geo XT<sup>™</sup> handheld unit. This unit generally provides sub-meter accuracy, but accuracy can range within three to five meters. Collected data were geo-referenced to the New York State Plane Coordinate System (North American Datum 1983, New York East, 3101, feet).

Forty-eight wetlands were field delineated within the survey area. A total of 22.3 acres of federal jurisdictional wetlands occur within the ROW, using either cleared ROW limits or 50 to 100-foot wide new ROW. Two wetland complexes (WM-DR6A and WM-DR2-A/B) had been previously delineated by consulting engineers for Beaver Dam Estates and Village at Goodwill subdivisions. These wetlands were reviewed and the locations approved by NYSDEC and were digitized onto the maps presented in the Wetlands Delineation Report (Attachment 5). One field delineated

wetland (WM-ALT-14A/B) intersects with a NYSDEC wetland. The NYSDEC wetland is WD-15, a Class II wetland. Cover classes of this wetland included palustrine forested (PFO1) and scrub-shrub (PSS) cover types.

## 4.2 Waterbodies

Streams that are crossed by the WM Line ROW were identified in the field and recorded on stream data sheets. Observations included width, depth, flow regime and direction, substrate, and bankside vegetation. Streams were documented with photographs which are included in Attachment 5. Wetland drainages were noted in sketch maps but not recorded on stream data sheets unless well-defined streambed and bank features were observed. Top of streambank was flagged with surveyor tape, and the location of the flagged boundary was recorded using a GPS unit. For streams less than five feet wide, the stream centerline was recorded using GPS. For streams greater than five feet wide, both banks were recorded using GPS. Stream nomenclature was similar to that established for wetlands, with the addition of “-ST” to indicate a stream versus a wetland.

Twenty-eight surface waters were identified in the field along the WM Line ROW. These waterbodies consist of 24 streams (five perennial, three intermittent, 16 ephemeral) and four open waters features. Descriptive information collected during the field surveys includes flow regime, relative velocity and direction, stream width, depth and substrate and bankside vegetation.

## 5.0 CONSTRUCTION ACTIVITIES

Construction activities and measures to minimize erosion and soil disturbances as well as other impacts are presented in Attachment 3, the EM&CP. In order to minimize disturbances, CHG&E typically uses low ground pressure tracked equipment for most construction activities. Other methodologies include temporary timber matting, any of the commercially available materials, or some type of improvised matting material. Poles will be transported to the specific pole locations by line truck and trailer or tracked equipment, as appropriate to minimize impacts to sensitive resources. The new poles will be single weathered steel poles that include tubular steel arms. In some locations concrete spread footers or caisson foundations may be installed; however, CHG&E prefers to directly imbed the poles and use guy wires for stability. In the event that a foundation is installed, the caisson holes will be constructed using either a rock drill or an auger to minimize excavation disturbances.

CHG&E has completed preliminary design of the Project. Wetlands were spanned to the greatest extent possible to minimize impact. There will be no permanent access roads constructed on or off the new ROW; all proposed access roads will be temporary and will be removed following construction. On the new ROW segments of the Project, the design currently sites five poles in wetlands. In the midsection in the Town of Montgomery there are two poles in wetland WM DR-4A/B on agricultural land and one pole in wetland WM DR-2A/B adjacent to the proposed Village at Goodwill development. There are two poles in wetland WM-ALT-14A/B on new ROW in the northern section on commercial property in the Village of Walden. No fill material will be used to facilitate pole placement. During the final design phase of the Project, CHG&E will make every effort to avoid placing poles in wetlands to the maximum extent practicable. There will be no mechanized clearing in forested wetlands. Clearing activities in the forested wetlands on the new ROW will be “drop and lop” as described in the EM&CP.

As part of the Project, some portions of the existing ROW will be improved to provide suitable access for reconstruction and ongoing maintenance. These improvements will include replacement of some deteriorated culverts or other drainage devices. Soil erosion and sediment control measures will be installed in accordance with the EM&CP (Attachment 3).

## **6.0 IMPACTS**

### **6.1 Methods to Minimize Impacts**

The WM Line ROW will be constructed to eliminate the considerable encroachment of the line in the Village of Walden and the Village of Montgomery (see Section 1.2 above). Approximately 2.8 miles of new ROW will be required. During July 2007, CHG&E and Tetra Tech inspected the existing ROW and proposed ROW to site structures and determine locations for on and off ROW access. No filling (permanent) impacts to wetlands are proposed. Project engineers will place structures and roads outside of wetland areas in upland locations to the extent practicable during final design. No activities will affect the bed or banks of the stream features. They will be spanned, and all work will occur on either side of the banks. As indicated in Section 5.0 above, in many locations low ground pressure tracked equipment or matting will be employed to minimize ground disturbance. The EM&CP (see Attachment 3) describes the methods to be used during construction to avoid or minimize impacts to environmental resources. All CHG&E contractors are required to adhere to the practices specified in the EM&CP.

### **6.2 Project Impacts and Mitigation**

Almost 80 percent of the WM Rebuild Project will consist of reconstruction on existing ROW. This ROW is cleared and maintained on a regular basis as part of CHG&E's normal routine vegetation management program. Therefore, there will be no new impacts to wetland areas along the existing WM Line ROW related to clearing or pole installation.

Approximately 20 percent (2.8 miles) of the Project will traverse new ROW. On the new ROW, there will be no discharge of fill material in wetlands or mechanical clearing in forested wetlands. Alteration of forested wetlands within the new ROW will be the primary impact to existing vegetation associated with Project construction. The new ROW will traverse eight jurisdictional wetlands and one stream. The wetlands include one pond and seven wetlands. All of the seven wetlands are forested (Red Maple hardwood swamp). The impact to the seven forested wetlands (5.5 acres) as a result of ROW clearing will be the conversion of successional forest to herbaceous and open shrub cover. Following construction activities it is expected that natural regeneration of vegetative species will occur; therefore the resulting plant community is expected to comprise local early successional low shrubs and young trees that will be selectively managed every few years by CHG&E.

Temporary ground disturbance related to construction access will be minimal. All temporary materials used to construct the access roads will be removed. Any temporary disturbance will be restored in accordance with the provisions in the EM&CP (see Attachment 3).

### **6.3 Conclusion**

The only Project impacts are the temporary effects described in Sections 5.0 and 6.0 of this document. There will be no permanent impacts to wetlands or waterbodies as a result of this Project. Although the clearing activity of the Project will affect the vegetational character of these resource areas, their conversion affects a small percentage of contiguous forested habitat. The wetlands on either side of the cleared ROW will remain heavily forested. Therefore, the clearing will not affect the ability of the surrounding wetlands to provide important shading and habitat functions.

CHG&E believes that this Project may be authorized under Nationwide Permit 12.

## **Attachment 1**

### **Indiana Bat and Turtle Memorandum**

**Attachment 2**  
**Purple Milkweed Report**

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## **Attachment 3**

# **Environmental Management and Construction Plans**



## **Attachment 4**

### **Determination of No Adverse Effect from the New York OPRHP**

**Attachment 5**  
**Wetlands Delineation Report**

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