

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

Case 11-T-0534 – Application of Rochester Gas and Electric Corporation for a Certificate of Environmental Compatibility and Public Need for the Construction of the "Rochester Area Reliability Project," Approximately 23.6 Miles of 115 Kilovolt Transmission Lines and 1.9 Miles of 345 Kilovolt Line in the City of Rochester and the Towns of Chili, Gates and Henrietta in Monroe County.

JOINT PROPOSAL

By: Rochester Gas and Electric Corporation  
Staff of the New York State Department of Public Service  
New York State Department of Environmental Conservation  
New York State Department of Agriculture and Markets

Dated: December 4, 2012  
Albany, New York

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**JOINT PROPOSAL**

This Joint Proposal is made as of the 6th day of December, 2012 by and among Rochester Gas and Electric Corporation ("RG&E"), Staff of the New York State Department of Public Service designated to represent the public interest in this proceeding ("DPS Staff"), the New York State Department of Environmental Conservation ("DEC"), and the New York State Department of Agriculture and Markets ("Ag & Mkts") (collectively referred to as the "Signatory Parties").

**INTRODUCTION**

On September 29, 2011, RG&E filed with the New York State Public Service Commission ("Commission") an application seeking a Certificate of Environmental Compatibility and Public Need ("Certificate"), pursuant to Article VII of the New York Public Service Law ("PSL"), authorizing construction, operation and maintenance of a new 9.6-mile 115 kV transmission line

(circuit 940), a new 11.1-mile 115 kV transmission line (circuit 941), the reconstruction of 2.0 miles of an existing 115 kV transmission line (circuit 906), a new 1.8-mile 345 kV transmission line (circuit 40), a new 345 kV/115 kV substation (Station 255), and improvements to three existing substations (Stations 23, 80, and 418), in the towns of Chili, Gates, and Henrietta and the City of Rochester in Monroe County, New York (the “Project”). The application was supplemented on December 16, 2011. In a letter dated January 20, 2012, the Secretary to the Commission found that the application was filed or otherwise in compliance with PSL §122.

By Order Granting Waiver Requests, issued January 20, 2012, the Commission granted RG&E’s request for waiver of certain of the Commission’s regulations concerning the contents of applications for a certificate under PSL Article VII.

A procedural conference of the active parties was held before Administrative Law Judge Eleanor Stein at the offices of the Commission in Albany, New York, on February 28, 2012. Public Statement hearings were held before Administrative Law Judge Stein in Henrietta and in Rochester on April 3, 2012, preceded in each case by informational sessions for the public.

After exploratory discussions among DPS Staff, DEC, Ag & Mkts and the Applicant on April 19, 2012, a Notice of Impending Negotiations was sent to all active parties and duly filed with the Commission on May 4, 2012. Settlement conferences were held on June 21, July 9, August 23, October 19, November 16, and November 26, 2012. An inspection of the site of Station 255 and of the area where Circuits 940 and 941 would be routed to avoid a federal conservation easement was conducted on August 14, 2012. An inspection of the site in the vicinity of Station 23 for which DPS Staff proposed for additional underground construction of Circuit 941 was conducted on September 7, 2012. In response to requests from other Signatory Parties, RG&E conducted a comprehensive wetland delineation, a protected species habitat

survey, a Station 255 relocation study and an invasive species survey of the proposed project routes as of May 2012, and the results of these surveys and studies were incorporated into Joint Proposal documents. Similarly, RG&E identified the location of known stands of Shellbark hickory (*Carya laciniosa*). Electronic communications were utilized to complete settlement negotiations.

After thorough discussion of the issues, the Signatory Parties recognize that the parties' various positions can be addressed through settlement, and agree that settlement is now feasible. The Signatory Parties further believe that this Joint Proposal gives fair and reasonable consideration to the interests of customers and transmission owners alike in assuring the provision of safe and adequate service.

## **TERMS OF JOINT PROPOSAL**

### **I. General Provisions**

1. It is understood that each provision of this Joint Proposal is in consideration and support of all the other provisions of this Joint Proposal and is expressly conditional upon approval of the terms of this Joint Proposal in full by the Commission. If the Commission fails to adopt the terms of this Joint Proposal, the Signatory Parties to the Joint Proposal shall be free to accept the Commission's terms or to individually pursue their respective positions in this proceeding without prejudice.

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

maintenance of the Project in compliance with the Joint Proposal and with the Proposed Certificate Conditions set forth in Appendix D attached hereto will comply with PSL Article VII and with the substantive provisions of applicable state law referenced in the Proposed Commission Findings set forth in Appendix C attached hereto.

3. 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.

4. 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.

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

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

7. Appendix A to this Joint Proposal lists the exhibits, testimony and affidavits to be admitted as record evidence in this proceeding.

## **II. Description of Project Location**

8. The Signatory Parties agree that the Description and Location of Facility which is Appendix B to this Joint Proposal accurately describes the location and configuration of the Project.

## **III. Environmental Compatibility and Public Need**

9. The Commission must consider the totality of all of the relevant factors in making its determination of environmental compatibility and public need. The relevant factors include, without limitation, the electric system, cost, environmental impact, availability and impact of alternatives, undergrounding considerations, conformance to long-range plans, state laws and local laws, and the public interest, convenience and necessity.

### **A. The Electric System**

10. This project is being undertaken to provide increased reliability to the RG&E system. RG&E avers that without the proposed facilities, the system's ability to meet the electricity needs of end-use consumers will decrease when unexpected equipment failures or other factors reduce the amount of available electricity. The Rochester Area electric system normal source capability is limited by the three sources into the system. These sources are:

the four bulk power transformers at Station 80, which tap the 345 kV bulk transmission system of the New York Power Authority ("NYPA"), and can provide approximately 1221 MW;

the three bulk power transformers at Station 122, which tap the NYPA 345 kV bulk transmission system, and can provide approximately 676 MW;

Constellation Energy Nuclear Group-owned R. E. Ginna Nuclear Power Plant, which can provide up to 610 MW.

These three sources provide a total electric capacity of approximately 2507 MW. A maintenance or forced outage of Ginna generation, which is the largest single source to the Rochester system, decreases the total capability to 1897 MW. This is approximately the peak load that is forecasted to be served in 2016. The 2011 summer peak load for the RG&E system was 1752 MW.

During a maintenance or forced outage of the Ginna generation at a Rochester area load level of only 1435 MW (only 81.9% of the 2011 RG&E summer peak load), subsequent loss of the 345/115 kV 462MW transformer #5 at Station 80 will cause the #1 and #3 345/115 kV transformers at Station 80, and all the three 345/115 kV transformers at Station 122 to be at their full operating capacity. If this operating condition occurred during a period when the Rochester area load was over 1435 MW, RG&E would be required to manually disconnect load which exceeds 1435 MW to keep from overloading and potentially damaging critical electric equipment.

Two of the 345/115 kV transformers (T1 and T3) at Station 80 have reached the ends of their useful lives and are scheduled to be replaced by larger capacity units by June 2014. T1 and T3 will each be replaced by 420 MW units, which are each 204 MW larger than their current ratings. The capacity of Station 80 will then increase to 1629 MW. With these capacity upgrades on T1 and T3, and during a maintenance or forced outage of the Ginna Nuclear Station at a

Rochester area load level of 1843 MW, subsequent loss of the 345/115kV, 462MW, transformer #5 at Station 80 will cause the Station 80 345/115kV transformers #1 and #3, and all the three 345/115kV transformers at Station 122 to be at their full capacity. If this operating condition occurred during a period when the Rochester load were over 1843 MW (a peak load level forecasted for 2014). RG&E would be required to manually disconnect load which exceeds 1843 MW to keep from overloading and potentially damaging critical electric equipment.

As a result, the new 345/115 kV Station 255 and the proposed transmission lines are required to be in service by December 2014.

## **B. Cost**

11. RG&E projects the Project will cost \$254,496,000. A table summarizing Project costs is included as Exhibit 32. The Project's cost and Project's construction activities, which are of relatively short duration, will not impact the local economy sufficiently to induce any significant changes in local residential, commercial, agricultural or industrial land use patterns. In addition, the installation of the transmission lines will be primarily within or adjacent to existing railroad and electric transmission rights-of-way, and the improvements to existing substations will not displace any existing land uses, disrupt any residential, commercial, agricultural, or industrial uses or otherwise cause a loss of business income. Accordingly, no mitigation is deemed necessary for economic impacts or for changes in residential, commercial or industrial land use patterns in the Project.

12. The proposed site for Station 255 is currently used for agriculture. Development of this land will reduce income from agricultural production, for which the property owner will receive just compensation through the purchase of this property. This change in land use and ownership will provide an increase in property tax revenue to the town of Chili.

### **C. Environmental Impact**

13. The application and exhibits to be supplied for the record describe the nature of the probable environmental impacts of the Project, and are briefly summarized below. The environmental impacts are expected to be minimal, and limited to temporary, construction-related disturbance and inconvenience.

### **Land Use**

14. Circuits 40, 940, 941 and the partial relocation of circuit 906 are proposed to be located along existing transmission and railroad corridors to minimize land use impacts and subsequent mitigation through active agricultural land and suburban and urban development consisting of residential and industrial land uses. The use of existing corridors and the underground configurations of some portions of the circuits minimize impacts on surrounding land uses. Proposed Station 255 will have a direct impact on land use because the proposed site is active agricultural land which will no longer be used for agriculture following site acquisition and development of the substation. Proposed Station 255 will result in the conversion of approximately 10 acres of active agricultural land to utility use. Active agricultural land traversed by the proposed transmission lines will be encumbered with the placement of new transmission structures, but agreements between local farm operators and RG&E will allow for

continued agricultural use. The proposed Project will not require the acquisition or relocation of any residences.

15. The proposed Project is consistent with the goals of the 2009 New York State Open Space Conservation Plan in that the plan recognizes that energy production and distribution capacity are important to New York State and the Northeast as a whole, and the Project makes use of a statewide planning and siting process that takes into consideration natural and recreational open spaces as well as the state's natural and cultural heritage. Local land use plans or policies of the towns of Chili, Gates, Henrietta, and the city of Rochester within Monroe County were heavily considered to guide routing, locations and configurations of the proposed circuit and substation to promote compatibility with existing and future land use.

### **Visual Resources**

16. Potential visual impacts are greatest when incompatible landscape features or elements are added in a way that detracts from the overall setting or the enjoyment of historic, scenic and recreational resources. The Project study area for visual resources includes 95 county and municipal parks, 1 national and 8 state recreational resources, and 100 National Register of Historic Places listed and eligible properties. Considering the use of existing electric transmission and railroad corridors for proposed circuits 40, 940 and 941 and the limited number of public viewpoints due to the relative isolation of these corridors, potential impacts to visual and recreational resources will be minimal. In the southern portion of the study area south of Station 67, the relatively level topography and intervening vegetation associated with wetland areas limit potential views of the new circuits to only a few road crossings. North of Station 67, the urban context and industrialized railroad corridor to be used by circuit 941 will minimize

potential visual impacts. Although the development of Station 255 at the proposed site will result in a major new utility use in an agricultural landscape, only middle ground views of the substation will be available from Scottsville Road to the west and Milewood Road to the north, and the new substation will be viewed in the context of the existing 345 kV transmission lines along with the new transmission lines.

17. RG&E proposed an overhead to underground transition structure to be placed in the southwest corner of the Frontier Field parking area off West Broad Street in Rochester. The 115 kV circuit was proposed to be placed underground along the toe of the slope of the Conrail railroad tracks to end at the Station 23 substation. Shifting the transition structure approximately 437 feet west along the proposed route to the slope of the intersection of the Conrail right-of-way and West Broad Street (as now proposed) will further obscure the transition structure's visibility to spectators arriving at the Frontier Field parking area, residents living west of West Broad Street and travelers arriving in Rochester on I-490 West.

### **Cultural Resources**

18. There are 49 archeological sites and 12 recorded historic sites within a 1 mile radius of the Project, none of which are within the Project's immediate footprint. Additionally, there are 104 known historic resources within a 3 miles radius, approximately 70% of which are within a 1 mile radius of the Project and are located in the historical urbanized neighborhoods of Rochester. Review of the historical development of the Project areas suggests that construction of circuits 40, 940 and 941 and associated Project elements is unlikely to impact significant historic resources in nearly any area of the preferred alignment. In conjunction with the preparation of the Environmental Management and Construction Plan ("EM&CP"), Phase I

archeological investigations will be conducted in areas of moderate to high archeological sensitivity in coordination with the Office of Parks, Recreation and Historic Preservation (OPRHP).

### **Terrestrial Ecology and Wetlands**

19. The RARP impacts approximately 200 acres along 24.5 miles of ROW with various widths ranging from 20 to 220 feet. The dispersion and density of vegetative land cover throughout the Project Corridor correlate with adjacent land use, development and existing natural resources, and include cultivated cropland, wetland communities, intermixed forested upland communities, and invasive plant species along transmission line rights-of-way and railroad beds. The most significant effect on vegetation is the long-term conversion of existing forested communities to managed grassland or shrubland within cleared areas of the proposed rights-of-way. Permanent removal of approximately 50 acres of forest cover is expected in areas that require widening of the existing right-of-way and clearing of the new right-of-way, and selective clearing of undesirable woody species will be required for improved road access or construction activities. Vegetation clearing and management techniques will include mechanical and chemical applications, or a combination of the two. Implementation of an invasive species management plan will mitigate potential spread of invasive plant and insect species (i.e., Emerald ash borer).

20. A delineation of wetland areas completed in May 2012 identified 39 wetlands within the survey corridor and confirmed an additional 12 previously delineated wetlands within the existing right-of-way between Station 67 and Station 418. Subsequent analysis indicated that a total of 35 wetland acres are located within the Project right-of-way, of which

approximately 13.4 acres are forested wetlands; the remaining 21.6 acres are either emergent or scrub-shrub wetlands. Approximately 27.2 wetland acres out of the total 35.0 acres within the project area are associated with 7 DEC-regulated wetlands (CI-5, CI-32, CI-40, CI-55, HR-26, HR-30, and GT-4). Of the 27.2 acres of State wetlands, 18.6 acres of wetland CI-5, a Class I wetland, will be impacted by the Project (the remaining State wetlands are Class II). The other non-State wetlands (i.e., Federal wetland), totaling approximately 7.8 acres, would likely fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Based on field examination and review of aerial imagery, topographic maps and hydrography data, 40 of the delineated wetlands appear to have a hydrologic connection to the Genesee River, Black Creek, Little Black Creek, and Red Creek and their associated tributaries. Potential effects to wetland areas may occur directly or indirectly during construction, operation, and maintenance of the proposed ROW. Based on preliminary design, approximately 38 poles will be located in state-regulated wetlands and 62 poles located in the adjacent area of state-regulated wetlands. Long-term effects to wetlands would only occur if the wetland could not be spanned, if dredging or filling was required for structure installation, or where clearing would convert and fragment forested wetlands. Approximately 13.4 acres of State and Federal regulated, forested wetlands will be cleared of trees and converted to scrub-shrub wetlands. Every practical attempt will be made to avoid wetlands and minimize the disturbance area. A wetland mitigation plan will be submitted as part of the EM&CP.

21. Wildlife habitats are associated with suburban, rural residential and agricultural areas. Many species likely to occur are those that have adapted to interactions with humans and are in environments that have been disturbed by land use practices. Construction of new transmission corridors and Station 255 will result in a change in the structure and function of

wildlife habitat within the developed area. Species in active agricultural land and that favor edge and early successional habitats are likely to experience temporary displacement during construction and will return once construction is complete. Along existing corridors that may have undergone secondary succession resulting in established saplings and shrubs, changes in structure and function during construction will include removal of woody vegetation that will likely require wildlife species to seek other suitable habitat in adjacent habitats. The greatest impacts to the structure and function of wildlife habitat will result from expanding the existing right-of-way corridor in areas that will permanently convert forested habitat to early successional shrubland. An increase in early successional habitat types will benefit species that favor edge habitat, adversely affect species that require forest cover for food, shelter and nesting, and provide new foraging corridors for predatory species. Based on preliminary design, approximately 19.6 acres of forested upland communities will be cleared of trees and converted to shrubland.

22. The New York Natural Heritage Program identified several Federal and State-level protected threatened and endangered species in the vicinity of the proposed Project, including the Peregrine Falcon (*Falco peregrines*), big shellbark hickory (*Carya laciniosa*), and the silver maple-ash swamp as occurring or having the potential to occur within the Project area. RG&E performed a review of ecological communities for the presence of suitable habitat for bog turtle and peregrine falcon and to identify the presence of big shellbark hickory within or adjacent to the proposed right-of-way. Consultation with the DEC Wildlife Manager for Region 8 regarding the status and distribution of the Peregrine Falcon indicated the proposed Project should have little or no threat to nesting birds as there are no known nest sites along the immediate vicinity of the proposed transmission route, and protected species habitat surveys

confirmed the conclusions made in the Application. Populations of big shellbark hickory have been confirmed in the silver maple-ash swamp community in Black Creek Swamp in the town of Chili, including one within the survey area outside of the proposed right-of-way. Protected species habitat surveys also confirmed that there is no suitable habitat for bog turtle within the Project area.

### **Topography and Soils**

23. The topography in Monroe County is nearly level to gently rolling; significant relief within the Project area is attributed to major drainages such as the Genesee River, the Erie Canal and Lake Ontario to the north. Analysis of Soil Survey Geographic data indicates 38 soil associations occur within the right-of-way. A total of four sand and gravel pits and a quarry have been identified within three miles of the proposed Project; none will be affected by construction or operation of the proposed Project. Substantial alterations of slope and gradient are not anticipated along the overhead portions of the alignment and mitigation measures will be implemented to address any soil erosion, compaction, and sedimentation during construction.

24. The underground segments would introduce additional topographic disturbances and best management practices will be implemented to curtail soil erosion and sedimentation during construction. The areas will be restored to pre-construction conditions. Proposed substation and transmission line improvements will be designed, constructed, operated, and maintained to be compatible with on-site geologic conditions and there are no geologic concerns that would have a long-term effect on the integrity of structures, as demonstrated by the long-standing presence of existing transmission lines along the proposed route. Two soil units along the proposed underground portions of the proposed Project indicate a depth to bedrock of less

than 5 feet; one area is near Station 418 and the other is encountered along Circuit 941 west of the Greater Rochester International Airport. Mechanical rock removal techniques will be implemented to achieve the required trench depth. Blasting, if required, will be performed in accordance with applicable state and local requirements.

### **Transportation**

25. Circuit 940 in the town of Chili and circuit 941 in the towns of Chili and Gates border the western edge of the Greater Rochester International Airport. The rights-of-way are parallel to Runway 4/22 and are approximately perpendicular to Runways 10/28 and 7/25. Circuit 941 will be buried for approximately 3,700 feet adjacent to the end of Runway 10/28 and alongside circuits 916 and 926, two natural gas pipelines, and a water main. The overhead configurations to the north and south will not interfere with airport operations or air navigation. RG&E will coordinate the final design and construction of the adjacent overhead portions with the Greater Rochester International Airport and will incorporate appropriate design criteria and clearance requirements into its design and construction. In addition, a Notice of Proposed Construction or Alteration will be submitted to the Federal Aviation Administration (FAA) to confirm that the proposed construction activities in the vicinity of the airport will not impact air navigation or airport operations. With the exception of the Greater Rochester International Airport, there are no airports or heliports within 5 miles of the Project rights-of-way.

26. The Project uses the active CSX Railroad (Main Line) and Rochester & Southern Railroad corridors (and land adjacent to those corridors) and crosses the CSX Railroad (West Shore Division). Circuit 906 currently occupies a 2.5-mile-long right-of-way adjacent to the western edge of the Rochester & Southern rail line right-of-way and will be partially rebuilt to

the eastern edge of the rail line to better accommodate circuits 940 and 941. After the partial rebuild, circuit 906 will cross the Rochester & Southern rail line in one location near the southern edge of the NYPA right-of-way. Over its entire length, circuit 940 crosses CSX rail lines in two locations and the Rochester & Southern rail line in one location. Over its entire length, circuit 941 crosses CSX rail lines in three locations and the Rochester & Southern rail line in nine locations. Specialized construction techniques such as horizontal boring or horizontal directional drilling (HDD) will likely be used to install certain crossings, such as the crossing with Interstate 490.

27. RG&E will coordinate with the CSX Railroad and Rochester & Southern rail line regarding the use of two of the rail line corridors and the crossing of a third corridor. The final design for the transmission lines will reflect appropriate design criteria and clearance requirements. Construction activities will also be coordinated with the active railroad lines to ensure that construction activities do not conflict with railroad operations.

28. The Project crosses 41 state, county, or local roadways in Monroe County. Circuit 940 will cross state, county, or local roadways in 17 locations, four of which will be overhead and 13 will be underground. Circuit 941 will cross state, county, or local roadways in 25 locations, 23 of which will be overhead and two will be underground. The partial rebuild of circuit 906 involves the relocation a 2.5-mile segment of circuit 906 from the western edge of the Rochester & Southern rail line to the eastern edge; the existing right-of-way crosses two roadways in an aboveground configuration and the partial rebuild of circuit 906 will cross the same roadways approximately 50 feet east of its existing location on the opposite side of the Rochester & Southern rail line. Circuit 40 will cross one roadway in an overhead configuration.

29. A total of 15 road crossings (including highway ramps) will be in an underground configuration. Each of these crossings will be evaluated to determine the most appropriate construction technique (e.g., open trench, horizontal boring, and directional drilling). Specialized construction techniques such as horizontal boring and directional drilling will be used where necessary to minimize traffic disruption following consultation with the appropriate transportation agency. Open trenching may be used for local road crossings where lane closures, detours, and/or nighttime construction may be accommodated with limited traffic disruption.

30. During construction, the rights-of-way will be accessed at these public road crossings. The specific location of construction access points from local roads will consider the maintenance of safe traffic operations. Traffic control measures will be developed as part of the final design to address temporary signage, stabilized construction entrances, procedures for moving equipment and materials onto the right-of-way and possibly the shoulder, private commercial driveways, and roadway closings. The traffic control measures will also address procedures to be implemented during conductor stringing and underground drilling to ensure maintenance and protection of traffic (MPT) operations. The traffic control measures for these specific areas will be developed and implemented through MPT plans. To minimize potential conflicts, RG&E intends, where possible, to locate transmission structures outside of road rights-of-way. Should parking along the local roadways be required, all vehicles will be situated such that the safe operation of the roadway is not impeded.

31. The number of trips generated by the construction crews for right-of-way clearing, transmission structure erection, and conductor stringing will be minimal and short-term. Construction-related truck traffic will consist of equipment and material deliveries to the structure sites and removal of cleared vegetation and construction debris from the right-of-way.

Truck trips for these various purposes will also be minimal. The construction laydown areas and contractor parking will be determined during final design. Construction workers will likely arrive at and leave the site outside morning and evening peak travel periods. Deliveries of oversized equipment will be scheduled during off-peak periods to minimize traffic disruption.

32. The project will cross Interstate 490 in two locations; circuit 940 will cross Interstate 490 in an underground configuration, and circuit 941 will cross Interstate 490 in an overhead configuration. The NYSDOT requires that a Utility Work Permit application be submitted to install utilities within or adjacent to state highway rights-of-way. Following final design, RG&E will submit a Utility Work Permit application for all applicable road crossings and will fully comply with the permit conditions. Best management practices will be employed during construction activities to prevent the deposition of materials onto local roadways. Soil washed, dropped, spilled, or tracked outside the limit of disturbance or onto public rights-of-way will be removed in a timely manner. All work within state highway rights-of-way will be designed and performed according to the traffic and safety standards and other substantive requirements contained in 17 NYCRR Part 131, entitled Accommodation of Utilities Within State Highway Right-of-Way; and other applicable governmental design standards

33. Circuit 941 crosses the Erie Canal, which is part of the New York State Canal System, along the border of the City of Rochester and the Town of Gates. The Project will require a work permit from the New York State Canal Corporation. Construction activities will also be subject to the Special Provisions for Work In or Over Navigable Waterways Operated by the New York State Canal Corporation. Through the issuance of these permits, the Canal Corporation will review the line design and ensure that the Project will allow for adequate clearances and setbacks to accommodate continued vessel traffic.

34. The northern portions of the project are located in urban and suburban areas with relatively dense development that provide opportunities for pedestrian traffic. In downtown Rochester, where pedestrian traffic would be greatest, circuit 941 will be underground. The remainder of the right-of-way in the City of Rochester will be along the CSX Railroad (Main Line) and Rochester & Southern Rail Line. The existing rail lines create limitations to pedestrian access. Circuit 940 will be underground in the towns of Gates and Chili, from Station 418 to Station 67, and will follow an existing electric transmission corridor that currently limit pedestrian access. In the Town of Gates, along the border of the City of Rochester, circuit 941 and the Rochester & Southern Rail Line cross the Erie Canal Heritage Trail. The Erie Canal Heritage Trail is part of the Erie Canalway National Heritage Corridor and is a designated National Recreation Trail. The corridor is currently used by the rail line, and the addition of circuit 941 should not pose any additional issues related to the continued use of the trail. Also, circuits 940 and 941 will cross the Genesee Valley Greenway Trail in the Town of Henrietta. Measures will be taken during construction to dissuade trail users from entering the construction zones to avoid potential conflicts with trail users, particularly during conductor stringing. Proposed signage and other mitigation measures to protect trail users during construction will be provided in the forthcoming EM&CP and developed in consultation with Friends of Genesee Valley Greenway ([www.fogvg.org](http://www.fogvg.org)). The southern portion of the Project is routed through rural areas characterized by large plots of agricultural and forested land not commonly visited or accessed by the public. In this portion, the right-of-way continues to follow the Rochester & Southern Rail Line to a point where it turns east to avoid a federal Department of Agriculture conservation easement, proceeds across agricultural land to a point northeast of the conservation easement, then turns south and proceeds to a route parallel to the right-of-way of NYPA's cross-

state lines. Both the rail line and the electric transmission line create pre-existing limitations to pedestrian access.

### **Water Quality and River Corridors**

35. The Project area is located within the Lower Genesee River Basin. Twenty-four (24) linear aquatic features were delineated in the field and one feature, delineated during 2009, was reviewed to verify whether identified site conditions persist. Of the total 25 linear aquatic features, nine (9) are mapped blue lines including Genesee River, Black Creek, Little Black Creek, and Red Creek and their associated tributaries. Potential Project-related impacts to surface waters will be associated with clearing and grading for construction access, installation and operation of the transmission line within and downstream of the Project corridor, and hazard tree removal in areas adjacent to and within the Project Corridor. To the extent possible, vehicular access across streams and other watercourses will be avoided by interrupting access along the right-of-way and precluding construction traffic through these areas. If necessary, stream crossings will be done in the dry to the extent possible or where existing stream crossings are available. To further reduce impacts to surface waters, transmission line structures will be located as far as possible from streams and rivers to facilitate the preservation or establishment of vegetative buffers. Operation of the Project and routine maintenance of the rights-of-way will not result in discharges to surface waters, increases in stormwater runoff volumes or erosion or flooding potential along the existing rights-of-way or surrounding lands.

### **Noise**

36. Construction of overhead and underground transmission lines will generate noise levels that are periodically audible along the Project route, access roads, structure sites,

conductor pulling sites, and staging and maintenance areas. Construction equipment will be similar to that used during typical public works projects and tree service operations. Construction at substations will include equipment modification and installation of new equipment and is not anticipated to be a significant source of construction noise. New Station 255 will require more extensive construction activity, including the creation of a permanent access road, clearing of vegetation and grading at the site. All construction activities will occur during daytime hours.

37. Noise generated by the operation of transmission lines typically contributes little to area noise levels when compared to other common sources, such as that from vehicles, aircraft and industrial sources, although the noise is greater with increasing transmission line voltages. The operation of substations involves switching, protection and control equipment and typically one or more transformers, which generate the sound generally described as a low humming, which will attenuate with distance at different rates depending on the transformer dimensions, voltage rating, and design. Substation maintenance will generate short-term, daytime traffic noise during Project maintenance and inspection that is not expected to result in adverse noise impacts.

38. Acoustic noise modeling results for Station 255 under several operating scenarios (i.e., with and without transformer cooling fans) indicate no exceedances of NYSDEC 6 dBA incremental noise increase criterion with the natural cooling (i.e., no fan operation) and low fan scenarios and two potential exceedances of the criterion under the high fan operating scenario. Based on the available data and acoustic modeling results, the Project can be adequately designed to meet all established noise limits and operate in compliance with NYSDEC Program Policy guidelines and local noise ordinances. Proposed Certificate Condition 44(b) provides limits on noise from Station 255 and requires post-construction testing of noise from Station 255.

### **Electric and Magnetic Fields**

39. Under the Commission’s September 11, 1990, “Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities,” the peak field at the edge of the right-of-way corresponding to the Winter Normal conductor rating shall not exceed 200 mG. The calculated magnetic field for the new circuits 40, 940 and 941 and relocated circuit 906 varies from 20 mG to 173 mG at the edge of the right-of-way. Under the standard set forth in Commission Opinion No. 78-13, the maximum electric field at the edge of the right-of-way shall not exceed 1.6 kV/m. The calculated electric field for the new circuits 40, 940 and 941 and relocated circuit 906 varies from 0.08 kV/m to 1.56 kV/m. An EMF study is included as Appendix C to the Application.

### **The Availability and Impact of Alternatives**

40. The Application and exhibits to be supplied for the record describe the availability and impact of alternatives to the Project and are briefly summarized below. Considering all factors, the Signatory Parties agree that the electric substation location for this Joint Proposal is preferable, on balance, to any of the alternatives considered. The location is preferred due to its relatively minimal impacts to wetlands, floodplains, topography, and residential areas. The selected routes and configurations are preferred because they use existing electric transmission and railroad corridors and avoid impacts to existing land uses.

### **Alternative Sites for Station 255**

41. The Signatory Parties considered and rejected various alternative sites for the new 345 kV/115 kV substation (Station 255). A total of eight alternative site locations were

considered for Station 255. Alternative Site 1 was the westernmost option and was determined to be the least desirable site for Station 255. Alternative Site 2 had direct residential impacts and significant site constraints including slope and potential wetland impacts, and was not considered a feasible site for Station 255. Alternative Site 3 had potential residential, wetland, and floodplain impacts and would have required significant quantities of fill, and was not considered desirable. Alternative Site 4 was considered viable but a review of floodplain mapping and site elevations indicated significant grading and filling would be likely. Alternative Site 5, Alternative Site 6a, and Alternative Site 6b would not have resulted in any direct residential, wetland or floodplain impacts, would have resulted in comparable impacts to active agricultural land, and were similarly situated with regard to proximity to residences and public roads. Of these three, Alternative Site 6a was considered most preferable because it had the lowest estimated grading and site development costs. After consideration of the route options for circuit 40, Alternative Site 7 was proposed to avoid residential impacts caused by the 345 kV line.

42. To minimize agricultural impacts, RG&E evaluated shifting the proposed Station 255 site approximately 200 feet and 400 feet to the east at the request of the property owner and the Department of Agriculture and Markets. Estimated site development costs would increase with either of these options due to the need for additional fill and grading. The location 400 feet to the east was decided upon as the best location of Station 255. The proposed site of Station 255 is located on approximately 10 acres of active agricultural land adjacent to the existing NYPA 345 kV right-of-way. Station 255 will be approximately 2,000 feet east of Scottsville Road and 2,000 feet west of the Genesee River.

### **Alternative Transmission Line Routes**

43. The Signatory Parties considered and rejected various alternative substation locations and electric transmission line routes for the Project. Two alternative routes, including several variations of each route, were considered for circuit 940; two alternative routes, including several variations, were considered for circuit 941; and five alternative routes were considered for circuit 40.

44. The rejected option for circuit 940 was the West Alternative. The West Alternative traverses significantly more residentially zoned land than the East Alternative (5.6 miles versus 1.8 miles). The West Alternative also crosses twice the amount of wooded wetlands (3.0 miles versus 1.5 miles) and nearly twice the amount of potential habitat for rare plants and animals (3.3 miles versus 1.7 miles). The West Alternative is approximately 0.4 mile longer than the East Alternative. Most importantly, the West Alternative would create approximately 6 miles of new electric transmission right-of-way, while the East Alternative would parallel or make use of existing electric transmission rights-of-way for nearly 8 miles out of the total 9.1 miles. After weighing all these factors, the East Alternative was selected as the preferred route for circuit 940.

45. The rejected option for circuit 941 was the Underground Alternative. Environmental factors are of limited value in comparing the Overhead Alternative and the Underground Alternative for circuit 941. Considering the shared alignment along the Rochester & Southern rail line north of the NYPA right-of-way, wetland impacts are comparable for both of these alternatives. Both alternatives also make extensive use of existing rights-of-way: railroad and utility corridors for the Overhead Alternative, public roadways for the Underground Alternative, and long-term land use impacts are negligible for either alternative. Both routes are

comparable in overall length (10.4 miles for the Underground Alternative compared to 9.8 miles). The most significant differentiators between these two alternates are the relative costs and construction-related impacts of overhead versus underground transmission lines. The cost of materials and construction along the Overhead Alternative is significantly lower than the cost of underground construction, regardless of the selected route. The greater costs for any specialized crossings or bridges could potentially add to the cost of underground construction. Localized disruptions during construction, including impact to local businesses and traffic impacts, are also greater with underground construction within public roadways; manhole installations would be particularly disruptive. Weighing these various cost and engineering considerations, the advantages of the Overhead Alternative clearly make that the recommended alternative for circuit 941.

46. The alternative routes for circuit 940 and circuit 941 include variations to avoid a 55-acre conservation easement owned by the Anna Gunther Living Trust that is crossed by the NYPA right-of-way just east of the Rochester & Southern rail line. RG&E considered three alternative routes to the north of the conservation easement that cross through a combination of active agricultural land and wetlands while avoiding residences and selected one of the routes – identified as V-V2-T2 – to be the preferred route in the event that Circuits 940 and 941 could not traverse the conservation easement. Subsequent to the filing of the Application, RG&E was unable to secure an agreement with the owner of the underlying parcel, and has since recommended that the preferred alternative (V-V2-T2) be certified as the route for Circuits 940 and 941.

47. Five routes were determined and considered for circuit 40 prior to the decision that Alternative Site 7 was the preferred location for Station 255. RG&E identified and evaluated

Station 255 Alternative Site 7 in response to the potential for circuit 40 to have impacts on surrounding residences. The five alternative routes previously considered for circuit 40 are named Alternative A through E. Alternative A places circuit 40 within 250 feet of three residences and would likely require the removal of two abandoned storage sheds. Most importantly, the need to deviate to the north of Station 419 and the two existing 115 kV lines near Station 80 would place the new 345 kV line in an adverse position relative to the expanded layout of Station 80. For this primary reason, Alternative A was eliminated from further consideration. Alternative B was the underground alternative and would be far more expensive than the overhead options and would require specialized construction techniques at two road crossings. Alternative C would provide the most direct overhead route between new Station 255 and Station 80 but would result in the most significant land use impacts – the acquisition and removal of at least one residence (possibly two) along Scottsville Road. To avoid those impacts, Alternative D would deviate from the existing NYPA right-of-way and create a new stand-alone 345 kV right-of-way of approximately 4,000 feet. Land use impacts would not be entirely avoided as this new right-of-way would be located between two residences and down the middle of an undeveloped parcel with 200 feet of frontage on Scottsville Road. This alternative would eliminate any development potential of this parcel and would place the circuit 40 centerline approximately 150 feet from each of the two residences. Alternative E provides another option to avoid the direct impact to residences along Scottsville Road. Land use impacts would not be entirely avoided with Alternative E because this new right-of-way would be within 180 feet of five residences along Morgan Road and Scottsville Road and would preempt development of 1,000 feet of road frontage along the south side of Morgan Road. After consideration of these alternative routes for Circuit 40, RG&E identified and evaluated Station 255 Alternative 7 to

avoid impacts on surrounding residences. From Station 255 Alternative Site 7, the new 345 kV line will exit the substation to the east, angle north at the edge of a wooded area, and continue east along the southern edge of the NYPA and Empire Pipeline right-of-way. From the point at which it joins the existing right-of-way, the new 345 kV line would follow the same alignment as Alternatives C, D, and E to Station 80.

### **Expansion of Existing Rights-of-Way**

48. Most of the new and rebuilt facilities for the proposed Project are located along existing electric transmission and railroad rights-of-way. Circuits 940, 941, and 40 will require expansion along the northern and southern edges of the existing NYPA 345 kV right-of-way. Additionally, circuit 940, circuit 941, and the partial rebuild of circuit 906 will require expansions of the Rochester & Southern and CSX railroad corridors. The northern portion of circuit 940 will be within the existing National Grid-RG&E electric transmission corridor and will not require expansion of the existing right-of-way.

### **Alternative Methods to Fulfill Energy Requirements**

49. Alternative methods to fulfill energy requirements considered by RG&E included a “no-action” alternative, various system alternatives and the feasibility of demand-side management, and distributed generation. The Signatory Parties agree that the “no-action” alternative is not a viable option because the Project is required to provide increased reliability for the RG&E system.

50. Alternative means of reinforcing the transmission and distribution system in the Greater Rochester area were evaluated prior to the selection of the proposed Project. The

alternatives included the construction of a new 345 kV/115 kV station at or in the vicinity of Station 23 and/or Station 418. It was judged that a new substation in downtown Rochester or Gates would not be feasible based on cost and environmental impact.

51. Energy efficiency, demand-side management and distributed generation are cost-effective, viable components of electric supply plans that can help to meet the State's environmental and greenhouse gas emission goals. However, they do not sufficiently address RG&E's obligation under the New York State Public Service Law to supply reliable and essential electric service to its customers. Energy efficiency, demand-side management and distributed generation are cost-effective, viable components of electric supply plans that can help to meet the State's environmental and greenhouse gas emission goals. However, they do not sufficiently address RG&E's obligation under the New York State Public Service Law to supply reliable and essential electric service to its customers. Demand-side management is viewed as a short-term, temporary solution to alleviate potential overloads during peak demand periods. To produce the same level of energy that will be produced by the Project, the Rochester area would need to attract, site, license, design and construct a large number of individual distributed generation projects over the next four years. This is not considered viable. The Project needs to be in service well before such distributed generation could be constructed. The need for greater reliability in the Rochester area necessitates construction of the proposed Project.

#### **D. Undergrounding Considerations**

52. Underground portions of the Project include circuit 940 between Station 67 and Station 418, circuit 941 near the Greater Rochester International Airport, and circuit 941 in downtown Rochester. The underground portions of this Project will use solid dielectric cables.

The other viable cable technology is high pressure fluid filled (“HPFF”) pipe-type cables. HPFF pipe-type cables consist of three cables installed in a steel pipe that is filled with dielectric fluid pressurized at 200 psig. As with the proposed solid dielectric cable system, HPFF pipe-type cables require manholes at periodic intervals for splicing. However, unlike solid dielectric cables, HPFF cable systems also require pressurization equipment and storage for the dielectric fluid, typically at both ends of the HPFF cable system. Considering these additional requirements and the potential spatial limitations at the points of transition from overhead to underground, HPFF cable technology was not preferred for this Project. At the request of DPS Staff, RG&E evaluated in Exhibit 27 extending the underground portion of the most northerly section of circuit 941 approximately 0.15 miles west to a location just east of W. Broad Street. After completion of the study, RG&E agreed to DPS Staff’s request that this additional segment be constructed underground. The primary advantage of extending circuit 941 underground an additional 0.15 miles is the elimination of the overhead crossing of NYS I-490. The major disadvantage is the risk associated with the construction of an underground crossing of an interstate highway. The construction options for crossing NYS I-490 underground are very limited, with HDD technology being the most viable solution.

#### **E. Conformance to Long-Range Plans for Expanding the Electric Power Grid**

53. The Project conforms to the requirements and planning objectives of the New York State Independent System Operator and is consistent with RG&E’s long-range plans for the expansion of its transmission facilities. The Project will serve the interests of electric system economy and reliability. With completion of this Project, RG&E will improve the reliability of

the transmission system for the loads served by this line and avoid unplanned outages due to potential failure of the existing facilities.

#### **F. System Reliability Impact Study**

54. The results of the System Impact Study indicate that the proposed Project would not adversely impact the reliability of the New York State Transmission System. The Project has no significant negative impact on the bulk power system except for increased post-contingency flows on the 115 kV circuit 910 (Station 418 – Station 67), on one 34.5 kV line (Station 49 – Station 42), and on the resulting 2-mile 345 kV line segment on the right-of-way west of Station 80 to the new Bulk Power System Station 255.

#### **H. State and Local Laws**

55. The Company will comply with the substantive provisions of each applicable state statute and regulation. Exhibit 7 identifies, for each local jurisdiction, every substantive local legal provision (ordinance, law, regulation, standard and requirement) potentially applicable to the Project and specifies every such local legal provision that RG&E has requested in Exhibit 7 that the Commission not apply because, as applied to the Project, such local legal provision is unreasonably restrictive in view of the existing technology, factors of costs or economics, or the needs of consumers. Except for those provisions the Company specifically requested that the Commission refuse to apply, the Company will comply with, and the location of the Line as proposed conforms to, all substantive local legal provisions that are applicable to the Project. Due to the preemptive effect of PSL Section 130, procedural requirements to obtain any approval, consent, permit, certificate or other condition for the construction or operation of the Project do not apply.

**I. Public Interest, Convenience and Necessity**

56. RG&E conducted public outreach regarding the Application, including letters to and meetings with local officials in areas affected by the Project, letters to property owners adjacent to the proposed Route, public open house meetings in the Towns of Henrietta, Chili, and Gates and the City of Rochester, and meetings with groups interested in the Project. Comments in support of the Project were filed by the municipalities in which the Project will be situated.

**IV. Proposed Findings**

57. The Signatory Parties agree that the record in this proceeding supports the Commission findings required by PSL Section 126 and set forth in Appendix C.

**V. Proposed Certificate Conditions**

58. The Signatory Parties agree that the Proposed Certificate Conditions set forth in Appendix D attached hereto are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of the Project as reconfigured herein.

**VI. Environmental Management & Construction Plan Specifications**

59. The Signatory Parties agree that the Specifications for Development of EM&CP set forth in Appendix E attached hereto and the EM&CP Best Practices Manual included as Exhibit 31 in Appendix A are acceptable and appropriate for application to the Project as described herein.

## **VII. Water Quality Certification**

60. The Signatory Parties agree that the record in this proceeding supports the issuance of the proposed water quality certification set forth in Appendix F attached hereto. On November 14, 2011, the Buffalo District of the USACE advised that the period specified in 33 CFR 325.2(b)(1)(ii) after which a waiver of the 401 water quality certification will be deemed to occur commences upon receipt of a permit application by the USACE, given that RG&E has requested a water quality certification from the Commission but not yet applied for a permit from the USACE. RG&E has agreed to provide to Staff a copy of its permit application contemporaneous with its filing with the USACE so the water quality certification may be issued before a waiver is deemed to occur. At its March 15, 2000 session, the Commission delegated the authority to issue WQCs to the Director of the Office of Electricity and Environment or his successor. The Director of the Office of Energy Efficiency and the Environment has, in fact, issued water quality certifications.

Dated: December 5, 2012

Respectfully submitted,

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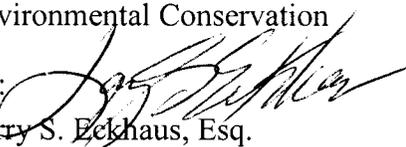
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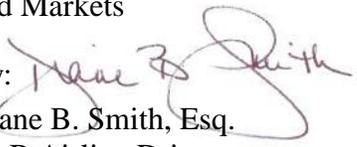
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