EXHIBIT JC-7

BEFORE THE

NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF JERSEY CENTRAL POWER & LIGHT COMPANY PURSUANT TO N.J.S.A. 40:55D-19 FOR A DETERMINATION THAT THE MONTVILLE-WHIPPANY 230 KV TRANSMISSION PROJECT IS REASONABLY NECESSARY FOR THE SERVICE, CONVENIENCE OR WELFARE OF THE PUBLIC

Direct Testimony

of

Kirsty M. Cronin

Re: Environmental Impacts and Permitting

I. INTRODUCTION AND BACKGROUND

Q. Please state your name and business address.

A. My name is Kirsty Cronin. My business address is 412 Mount Kemble Avenue, Morristown, NJ 07962.

Q. By whom are you employed and in what capacity?

A. I am employed by The Louis Berger Group, Inc. ("Louis Berger"), as a Principal Environmental Scientist in Transmission Services in the Power and Energy Business Unit.

Q. Please describe your professional experience and educational background.

A. As a Principal Environmental Scientist, my responsibilities include identification and review of potential routes for electric transmission lines and parcels for substations, conducting and overseeing environmental studies (i.e., wetland delineations, threatened and endangered species habitat surveys) and obtaining federal, state and local environmental permits and approvals, as needed. I serve both as the Project Manager for Louis Berger for the Montville-Whippany 230 kV Transmission Project (the "Project"), and as a member of the Routing Team. As a Routing Team member, I was directly involved in the development and analysis of routes, public outreach efforts, comparison of alternatives including potential impacts to natural resources, and preparation of the Route Selection Study Report ("Routing Study").

I have a B.S. from University of Rhode Island (1998) and an M.S. from Oregon State University (2000). From 1999 to 2001, I worked as an environmental consultant for Schoor DePalma in Manalapan, Monmouth County,

New Jersey. In 2001, I joined Louis Berger as an Environmental Scientist. During this time my responsibilities included conducting wetland delineations, preparation of federal and state wetland permit applications (including New Jersey Department of Environmental Protection ("NJDEP") permits), threatened and endangered species habitat assessment and surveys, and compliance with the National Environmental Policy Act ("NEPA") (i.e., preparation of Environmental Impacts Statements, Environmental Assessments and Alternative Analyses).

For the past 12 years I have provided environmental studies and permitting support for large-scale linear projects including transportation and transmission projects.

Attached as Exhibit KMC-1 is my curriculum vitae.

Q. Have you previously testified in Board of Public Utilities ("Board" or "BPU") proceedings?

A. No, but I have submitted pre-filed written testimony before the BPU on behalf of Jersey Central Power & Light Company ("JCP&L" or the "Company") for the Oceanview 230 kV Transmission Project in Docket No. EO14030281.

Q. Have you testified in proceedings before other utility regulatory commissions?

A. No.

Q. Would you describe the purpose of your testimony?

A. I am testifying on behalf of JCP&L and the purpose of my testimony is to describe the environmental impacts and permitting process for the proposed Project route, a 230 kilovolt ("kV") high voltage transmission line beginning at

the JCP&L Whippany substation in East Hanover Township, Morris County, New Jersey, and ending at the Montville substation in Montville Township, Morris County, New Jersey. My testimony describes the potential environmental impacts associated with the Project and the necessary permits required.

II. DESCRIPTION OF THE ENVIRONMENTAL PERMITTING PROCESS

Q. Please list the permits/approvals that JCP&L has applied for or may need to apply for from any Federal, State, or local government agency in order to construct and operate the Project.

A. In addition to this Petition before the Board of Public Utilities, JCP&L will be applying to various agencies for the following approvals and authorizations to proceed with the Project:

1. NJDEP Division of Land Use Regulation ("DLUR") Freshwater Wetland Letter of Interpretation ("LOI"). The LOI confirms the boundaries and resource value classification for freshwater wetlands, transition areas, and/or State open waters within the existing transmission line right-of-way ("ROW"). JCP&L will be submitting an application to the NJDEP DLUR for an LOI in the third quarter of 2015. The application should take approximately 90 calendar days to process by the NJDEP.
2. NJDEP DLUR Freshwater Wetlands and Flood Hazard Area Control Act Permits. These permits are required for all activities located within regulated areas including freshwater wetlands and associated transition areas, streams, floodplains and riparian zones. JCP&L will submit an application with the

NJDEP for a freshwater wetland general permit for geotechnical borings,[1] in the third quarter of 2015. JCP&L will submit applications with the NJDEP for a freshwater wetland individual permit,[2] and a flood hazard area individual permit[3] in the fourth quarter of 2015 for impacts associated with the construction of the transmission line. Permit applications are expected to be approved by the NJDEP in the first quarter of 2016 for the freshwater general permit and the second quarter of 2016 for the freshwater wetland individual permit and flood hazard area individual permit. The application process for the freshwater wetland general permit takes approximately 90 calendar days, the application process for the freshwater wetland individual permit takes approximately 180 days, and the application process for the flood hazard area individual permit takes approximately 90 calendar days, with the possibility of a 30-day extension for a total of 120 days.

3. NJDEP Division of Water Quality Stormwater Construction Permit Requests for Authorization ("RFA"): Construction Activities (5G3). An RFA permits

[1] A Freshwater General Permit authorizes certain activities within regulated freshwater wetlands, freshwater wetlands transition area, and/or State open water, provided that the various restrictions are met for that type of General Permit requested. Specifically, the Company will be submitting an application with the NJDEP for a General Permit 12 (Surveying and Investigating). The General Permit 12 authorizes activities in freshwater wetlands, transition areas and State open waters necessary for surveying and investigative activities such as soil borings dug by machine and the digging of exploratory pits and/or other temporary activities necessary for a geotechnical investigation. For a project to be eligible for a General Permit 12, temporary disturbance must be the minimum necessary to obtain the desired information.

[2] Transmission line projects that will impact greater than 0.5 acre of freshwater wetlands, freshwater wetlands transition area and/or State open water will require a Freshwater Wetlands Individual Permit. A Freshwater Wetland Individual Permit is for activities having substantial wetlands impacts, and seeks to eliminate and/or reduce impacts through an alternatives analysis.

[3]In the State of New Jersey, a flood hazard area exists along all regulated waters that have a drainage area of 50 acres or more. In addition, all regulated waters have a riparian zone. The proposed project will involve clearing within the flood hazard area of regulated waters, and is therefore subject to the regulations contained in the New Jersey Flood Hazard Area Control Act Rules at N.J.A.C. 7:13. A Flood Hazard Area Individual Permit will be sought for the proposed project.

authorize point source discharges from construction activities that disturb one acre or more of land, or disturb less than one acre but are part of a larger development including clearing, grading, and excavation. JCP&L will submit an RFA application at least 30 days prior to land disturbance which is expected in the third quarter of 2016. Applications submitted using the NJDEP Stormwater Construction E-permitting system are processed within 24 hours.

4. New Jersey Department of Transportation Highway Occupancy Permit. The permit is required for the crossing of any State or Federal highway, including Interstate 80, Route 46, etc. The Highway Occupancy Permit applications are expected to be submitted to the NJDOT in the first quarter of 2016. The NJDOT will determine if an application is deemed administratively complete within 45 days of receipt. If the application is deemed complete the NJDOT shall have a maximum application review time of 45 days within which to approve or deny the application. The NJDOT may extend this review time for permits for longitudinal installations over 660 feet (0.125 miles) long.

5. Morris County Soil Conservation District Certificate of Soil Erosion and Sediment Control ("SESC"). A certificate of SESC is required for all activities associated with soil disturbances greater than 5,000 square feet. SESC Plans are expected to be submitted to the Morris County Soil Conservation District in the first quarter of 2016. SESC Plans are reviewed within 30 days of receipt.

6. New Jersey State Historic Preservation Office Approval. Phase IA cultural resource investigations will be conducted in support of the project. Phase IA historical and archaeological surveys and/or architectural surveys are required under the following conditions (N.J.A.C. 7:7A-12.2(l)):

   a. Proposed projects containing known historic or archaeological resources, based upon information contained within the application, or as identified on copies of historic property maps prepared by the NJDEP;

   b. Proposed projects on sites that exceed 20 acres in size which include a permanent water body (for example wetlands, pond, lake, river or perennial stream) or are located within 250 feet of a permanent water body;

   c. Proposed projects for which available maps, photographs, or other information, or observations made during a site visit, indicate the presence of buildings, structures, or ruins over 50 years old that could potentially be affected by the proposed project;

   d. Proposed projects including new, replacement, reconstructed, or rehabilitated bridges or culverts; and

   e. Proposed projects on which letters are received from concerned citizens or others indicating the possible presence of historic properties within or adjacent to the project.

In addition, as part of the NJDEP Permitting process, JCP&L will be coordinating with numerous agencies including, but not limited to: NJDEP Green Acres Program (for potential Green Acres-encumbered properties), NJDEP

Division of Parks and Forestry property owner for parcels located through Troy Meadows Natural Area [4]), U.S. Fish and Wildlife Service ("USFWS") (Federal threatened and endangered species consultation), and the NJDEP Endangered and Non-game Species Program (State threatened and endangered species consultation).

Q. Why will necessary permit/approval applications be submitted after the filing of the Petition at the BPU?

A. Permit applications including NJDEP Freshwater Wetland Individual Permit, Flood Hazard Area Individual Permit, SESC Approval, and NJDOT Occupancy Permit require submittal of design plans. A RFA application will be submitted after receiving SESC Approval for the Morris County Soil Conservation District. In order to determine the acreage of permanent and temporary impacts to regulated areas (freshwater wetlands, transition areas, open waters and riparian zones), final design (approximately 75%) including foundation size, access roads, laydown areas and pulling areas, is required. Final design of the project is not expected until third quarter of 2015.

Final design plans are not required for the NJDEP Freshwater Wetland LOI Application and the Freshwater Wetland General Permit 12 (Surveying and Investigating). The Company will be submitting the NJDEP Freshwater Wetland LOI Application in the third quarter of 2015.

[4] Troy Meadows is a large wetland complex located in East Hanover, Hanover, and Parsippany-Troy Hills, in Morris County, New Jersey. The area has been designated as a National Natural Landmark by the National Park Service, and a New Jersey Natural Area and Natural Heritage Priority Site by the NJDEP.

Q. Are there any freshwater wetlands located within the Project Area[5]?

A. Yes, freshwater wetlands are present within the Project Area and include emergent, scrub-shrub and forested wetlands. Wetlands will be delineated by Louis Berger in accordance with the procedures outlined in the *1989 Interagency Federal Manual for Identifying and Delineating Jurisdictional Wetlands*.

Q. Are there any stream crossings within the Project Area?

A. Yes, based on National Hydrography Dataset (NHD) GIS information, the Project will include approximately 29 stream crossings. However, the majority of streams crossed are presently crossed by one or more existing transmission lines. The Project will result in new stream crossings of the Rockaway River and associated tributaries within an undeveloped portion of the existing ROW near the Montville and Parsippany-Troy Hills boundary. The Project will not result in the crossing of Category One Waters.[6] Long-term impacts to the water crossings would typically be associated with the loss of shading due to the clearing of vegetation along banks of affected streams and within the regulated riparian areas. The placement of structures within the stream channel is not proposed. As part of the permitting process, JCP&L will apply for and obtain a NJDEP Flood Hazard Area Permit for potential impacts to floodplains and riparian areas. If required by the NJDEP, compensatory mitigation will be provided.

[5] Project Area includes the proposed optimal ROW necessary for the construction and operation of the Preferred Route. The Routing Process and selection of the Preferred Route is described in Peter W. Sparhawk's Testimony, Exhibit JC-6. The Preferred Route and associated optimal ROW width is described in David Kozy's Testimony, Exhibit JC-3.

[6] Category One waters are defined by the Surface Water Quality Standards rules (N.J.A.C. 7:9B-1.4) as waters protected from any measurable changes in water quality because of their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources.

Q. Does potentially suitable habitat for threatened and endangered species exist within the Project Area?

A. Yes, the NJDEP Landscape mapping data has identified potentially suitable habitat for listed species within the Project Area. The NJDEP Landscape Project is a landscape-level approach to the conservation of imperiled wildlife species in New Jersey. The Landscape Project geographic information system depicts critical wildlife habitat through the integration of species location data, land-use/land-cover, and species life history information. Based on Landscape Project Mapping, the following threatened or endangered species were identified within the vicinity of the Preferred Route (Route A3: blue-spotted salamander (*Ambystoma laterale*) (state endangered), red-shouldered hawk (*Buteo lineatus*) (state endangered – breeding population), barred owl (*Strix varia*) (state threatened), long-eared owl (*Asio otus*) (state threatened), Northern harrier (*Circus cyaneus*) (state endangered), bobcat (*Lynx rufus*) (state endangered), bald eagle (*Haliaeetus leucocephalus*) (state endangered – breeding population, state threatened – nonbreeding population), and wood turtle (*Glyptemys insculpta*) (state threatened).

According to the Natural Heritage Grid Map ("NJDEP-ONLM"), the Preferred Route is within 1 mile of identified habitat for three rare plant species: humped bladderwort (*Utricularia gibba*), star duckweed (*Lemna trisulca*) and low spearwort (*Ranunculus pusillus var. pusillus*).

The New Jersey Field Office of the USFWS now requires the use of the Information, Planning, and Conservation ("IPaC") planning tool to obtain an

official species list in a determined project area. According to the USFWS iPaC, the following species have been documented within the vicinity of the Preferred Route: Indiana bat (*Myotis sodalis*) (federal endangered), bog turtle (*Glyptemys muhlenbergii*) (federal threatened), and northern long-eared bat (*Myotis septentrionalis*) (proposed federal endangered).

Coordination with the NJDEP Endangered and Non-game Species Program and the USFWS will be required as part of the permitting process. If required, species specific surveys and mitigation of critical habitat will be completed.

III. MITIGATION OF ENVIRONMENTAL IMPACTS

Q. Are there any environmental impacts associated with this Project?

A. Yes. The Project will result in both permanent and temporary impacts to freshwater wetlands, transition areas and riparian areas. Permanent impacts associated with the project include the placement of structure foundations within regulated areas. The NJDEP also considers activities that will change the character of the existing wetland (i.e., conversion of a forested wetland to a scrub-shrub wetland) as a permanent disturbance. Tree clearing required for construction and operation of the transmission line in undeveloped forested portions of the ROW will be considered permanent impacts by the NJDEP. Installation of a transmission line in scrub-shrub or emergent wetlands will not be considered a permanent disturbance. Temporary impacts are those impacts caused by permitted regulated activities that are discontinued within six months.

The majority of temporary impacts associated with the Project will be the result of construction access including access roads, work pads and pulling areas[7].

Project-related impacts to regulated areas will be avoided to the maximum extent feasible and practicable. Where impacts cannot be avoided, measures will be implemented to minimize impacts. As part of the permitting process, compensatory mitigation will be proposed for the purpose of mitigating unavoidable Project-related impacts.

Q. Does the Preferred Route minimize environmental impacts?

A. Yes, it does. The Routing Team developed three Alternative Routes (Alternative Route A3, Alternative Route B, and Alternative Route C) and one Route Option (Alternative Route A3 with Option), based on the three Preliminary Alternative Routes. The Alternative Routes were assessed and compared with respect to ROW or constructability challenges (ROW constraints, design challenges and construction challenges), their potential impacts on any noted natural resources (water resources, vegetation, wildlife and soils), and with respect to human uses (land use, recreation and aesthetics and cultural resources). Impacts to the natural environment were determined using publically available data including mapped wetlands, streams, conservation lands, potential threatened and endangered species habitat, floodplain information, soil information and aerial imagery (see Section 4.3 of the Routing Study).

In determining the Preferred Route, the Routing Team assessed which Alternative Route had the overall minimal environmental impact. According to

[7] Pulling areas are temporary areas located along the transmission line necessary for the installation of the conductors. Conductor installation requires the placement of specialized equipment at each end of the sections being strung. The wire conductors are pulled between these areas.

the NJDEP Freshwater Wetland mapping, Routes B and C would traverse the greatest distance of mapped wetlands (approximately 5.6 and 5.8 miles, respectively), while Route A3 and the Route A3 Option would traverse 5.0 miles each. In addition to crossing the fewer mapped wetlands, Route A3 would result in fewer impacts to wetlands, as it is the shortest route and would require the least amount of new ROW compared to the other Alternative Routes, which would disturb new areas over a longer distance. Route A3 and the Route A3 Option also minimize the amount of new wetland impacts by paralleling or rebuilding existing transmission lines.

JCP&L endeavored to reduce impacts to vegetation by considering routes that would use existing, cleared ROW. Clearing the ROW of vegetation, constructing transmission line structures, and moving vehicles along the ROW can affect soils in various ways, including altering physical properties, altering soil engineering properties, and increasing the potential for erosion. Route A3, which uses the most existing ROW, would require the least amount of forest clearing (approximately 41.6 acres) while Route C, which uses the least existing ROW, would require the largest amount of forest clearing (approximately 113 acres). The alternative Route A3 Option would slightly increase the amount of required tree clearing compared to A3. Route B, which parallels or rebuilds existing transmission for about 36 percent of its route, would require approximately 67.4 acres of forest clearing. In areas that require new ROW, a 100- to 120-foot-wide ROW will be cleared and maintained in accordance with JCP&L's Vegetation Management Program.

After analyzing and comparing the three Alternative Routes against potential impacts to the natural environment, Route A3 is preferred over other alternatives. The majority of Route A3 would be constructed within existing transmission ROW and, therefore, would result in minimal changes to the existing plant communities and wildlife habitat (i.e., conversion of a forested wetland to an emergent wetland). Route A3 would require tree clearing through Troy Meadows and ROW that is currently undeveloped; however, it would require significantly less tree clearing than Routes B and C. Forest clearing can result in numerous impacts including forest fragmentation and creation of new edge habitat, wetland function modification, soil erosion and increased stormwater runoff. Therefore, Route A3 would be the preferred route from a natural environment perspective, due to the use of existing transmission line ROWs and eliminating the need to clear additional forest cover and impact wildlife habitat. JCP&L witness Peter Sparhawk from Louis Berger will provide a detailed explanation of the route selection process and analysis.

Q. Please describe what actions the Company will be taken to further minimize environmental impacts on the Preferred Route.

A. JCP&L will be completing the following actions to minimize potential environmental impacts associated with the Project:

1. Field studies of the Preferred Route will be conducted to determine the exact location of sensitive natural resources within the project area, including a wetland delineation, and threatened and endangered species habitat assessments.

A desktop analysis and field verification will be conducted to determine the riparian area, flood hazard area and floodway along a regulated water within the Project Area.

2. During the preliminary design phase, attempts to restrict disturbance to the extent feasible within the existing maintained ROW will be made so as to minimize permanent impacts to wetlands, forested areas and other critical areas. Existing wetland delineation geographic information system ("GIS") data, NJDEP Landscape Data, NJDEP mapped floodplain, and flood hazard area riparian areas will be placed on the base design maps to aid in determining the location of access roads and transmission structures. Critical areas will be spanned aerially wherever feasible. For the rebuild portion of the Project, placement of the new structures will be within the vicinity of the existing structures to avoid additional areas of impact.

3. During construction, a number of vegetative and engineered erosion and sediment control measures will be implemented to avoid sediment migration to regulated areas on and off-site. Vegetative soil erosion control measures include maintenance of existing vegetation, permanent and temporary vegetative cover for soil stabilization, and the protection of existing trees and vegetation during construction. Engineered soil erosion control measures include dust control, slope protection matting, and stabilized construction access. Only selected vegetation will be cleared and grubbed. Clearing and grubbing will be limited to what is initially necessary to install access roads or until such time as work is scheduled

for that area. Ongoing maintenance of all soil erosion and sediment control measures will ensure their proper function and operation.

4. Temporarily disturbed areas will be restored to their pre-existing conditions. Depending upon the extent of disturbance, areas requiring revegetation will be seeded with grass (e.g., annual ryegrass) to stabilize disturbed soils and some areas will be allowed to naturally revegetate. If the disturbed area is located within a wetland, the area may be seeded with wetland seed mix to stabilize the ground and prevent erosion until natural vegetation is re-established. If the disturbed area is located within an erosion hazard area, the area will be restored to pre-existing contours and stabilized by seeding with wetland seed mix for wetland areas and seeding with annual ryegrass for upland/transition areas. In all other areas, the disturbed area will be restored to pre-existing contours and will be allowed to naturally revegetate to avoid the potential for introducing undesirable species by seeding. If there is likelihood that phragmites or other undesirable species could invade the disturbed area, then the area would be replanted with appropriate native species. Revegetation with native species is required only when disturbance within the work area has resulted in the permanent destruction of vegetation and disturbance to the soil which would preclude natural revegetation within one growing season.

5. To minimize potential construction related impacts to state-listed plant and wildlife species, JCP&L would adhere to permit conditions imposing seasonal work restrictions based on sensitive life stages.

Q. Are there any environmental impacts associated with Project construction activities at the Montville and Whippany substations?

A. Preliminary design indicates that proposed improvements at both the Montville and Whippany Substations to accommodate the new equipment and connection to the Project will result in impacts to NJDEP non-regulated areas. Improvement to the substations will be included in the Soil Erosion and Sediment Control Plan submitted to the Morris County Soil Conservation District for approval. Compliance with New Jersey Stormwater Management Rules (N.J.A.C. 7:8) will be required if the expansion of the Substations will result in 0.25 acre of new impervious surface and/or 1 acre of disturbance overall. Any such disturbances will be located on land currently owned by JCP&L.

Q. After the Project is completed, will maintenance activities on the ROW result in any additional environmental impacts?

A. The ROW will be maintained in accordance with JCP&L's vegetation management program. Additional clearing or removal of priority trees outside of the proposed ROW may be necessary. In compliance with State and Federal regulations, JCP&L has identified clearance distances between vegetation and any overhead transmission lines, taking into consideration transmission line voltage, the effects of ambient temperature on conductor sag under maximum design loading, and the effects of wind velocities on conductor sway. JCP&L has established the ROW clearances zone. The ROW Clearance Zone is identified as the minimum clearance distance required to ensure public safety and the efficient

and reliable supply of electric power. All incompatible vegetation in the ROW or overhanging the ROW shall be removed, pruned back to the main stem, or controlled using herbicides. Vegetation clearing and/or maintenance will be conducted in compliance with the NJDEP Approved "JCP&L Multi-Permit Application Supplemental Information Describing Practices for Maintenance Work in Water Resources Areas," date June 3, 2010. Typically, on transmission lines of 115 kV and above, the plant cover of the ROW has been and will be maintained as a herb-fern-grass community with tall shrub-herb-ferngrass and low growing trees and shrubs (dogwoods, alders, etc.) in the border zone.

Any required clearing of regulated forested vegetation in regulated areas within the ROW will be included in the impact calculations submitted as part of the NJDEP Freshwater Wetland Individual Permit and Flood Hazard Area Individual Permit applications. If required, compensatory mitigation will be provided.

Q. Would underground construction of the Montville-Whippany 230 kV transmission line result in additional environmental issues compared to the planned overhead construction?

A. Impacts associated with undergrounding transmission lines through non-forested wetlands, transition areas, and riparian areas are greater than traditional overhead construction. Impacts associated with overhead transmission lines are limited to the footprint of the structure foundations, while impacts associated with underground transmission lines would occur over the entire length of the project during construction/placement on the buried concrete duct banks. Horizontal

drilling can allow crossing some wetlands, but the maximum feasible length is approximately 3,000 feet. As noted on the NJDEP website (http://www.nj.gov/dep/landuse/fww/fww_gp02.html) "Directionally drilled utility lines, if improperly constructed, have the potential to act as French drains, in essence creating a conduit for water to flow."

In addition to the duct banks, the Project would also require placement of manholes every approximately 2,500 feet. Two manholes would be placed side by side; each manhole is approximately 28 feet long, 8 feet wide, and 7 feet tall and weigh approximately 80,000 pounds. The placement of manholes in regulated areas would be a permanent impact and require NJDEP permits. JCP&L witness Dave Kozy, Jr. from FirstEnergy will provide a detailed explanation of the design, engineering, and construction of the Project, including consideration for placing the 230 kV facilities underground.

Q. Does this conclude your direct testimony?

A. Yes, it does.

KIRSTY CRONIN, PWS Principal Environmental Scientist

Ms. Cronin is a principal environmental scientist with 15 total years of experience, including twelve years with LBG. She has conducted environmental studies and permitting for transmission lines, linear transportation systems and federal correctional facilities through the United States. Ms. Cronin has prepared and obtained environmental permits from federal, state, and local agencies including U.S. Army Corps of Engineers New York and Philadelphia Districts, New Jersey Department of Environmental Protection, New Jersey Pinelands Commission and New Jersey Highlands Council. Ms. Cronin, as lead environmental scientist for several federal projects, has engaged in agency consultation, extensive field studies, public meetings, impact analysis of alternative, and preparation of Environmental Impacts Statement and federal/state permit applications.

FIRM Louis Berger Group

EDUCATION
- MS, Environmental Soil Science
- BS, Soil and Water Resources

REGISTRATIONS / CERTIFICATIONS
- Professional Wetlands Scientist

YEARS EXPERIENCE 15
YEARS WITH FIRM 12

RELEVANT PROJECT EXPERIENCE

Larrabee –Oceanview 230 kV Transmission Project. Project Manager. Managed LBG teams for the permitting of the proposed 230 kV line. Oversight of Cultural Resources efforts, Flood Hazard permitting team and Freshwater Wetland permitting team. Project includes the preparation and submittal of an Application to the NJBPU. She is responsible for daily client contact, organizing and facilitating data gathering efforts, managing staff allocation, budgets, and schedule.

Englishtown –Manalapan 115 kV Transmission Project. Project Manager. Managed LBG teams for the permitting of the proposed 115 kV line. Oversight of Cultural Resources efforts, Flood Hazard permitting team and Freshwater Wetland permitting team. Responsible for daily client contact, organizing and facilitating data gathering efforts, managing staff allocation, budgets, and schedule.

Montville-Whippany 230 kV Transmission Project. Project Manager. Currently managing LBG team in completing a routing and siting study to select a proposed and alternate route for a new 230 kV transmission line in northern New Jersey. Project will include a Route Feasibility Study, Natural Resource Inventory (wetland delineation, threaten and endangered species habitat assessment), NJDEP Freshwater Wetland Permitting and Flood Hazard Area Permitting. Application to the NJBPU will be completed as part of this project.

Martinsville Substation Project. Project Manager. Ms. Cronin is currently serving as Project Manager for the site selection studies and permitting efforts associated with a potential new substation for JCP&L (FE subsidiary). Permitting efforts in NJDEP Freshwater Wetland Individual, NJDEP Flood Hazard Area Individual and a Green Acres Major Diversion. Responsible for daily client contact, organizing and facilitating data gathering efforts, managing staff allocation, budgets, and schedule.

Public Service Electric and Gas Company, Susquehanna-Roseland 500 kV Transmission Line, Warren, Sussex and Morris Counties, New Jersey. Principal scientist. Responsible for the preparation and submittal of a Highland Applicability and Water Quality Management Plan (WQMP) Consistency Determination to the NJDEP Division of Watershed Management (DWM) requesting an exemption from the Highlands Act Rules in accordance with NJAC 7:38-2.3(a)11. Also responsible for the preparation and submittal of a Freshwater

Wetland General Permit No. 12 (Geotechnical and Archaeological Investigation) Application, Freshwater Wetland Individual Permit Application and a Water Quality Certification to the NJDEP, Division of Land Use Regulations for impacts associated with the construction of a proposed 500 kV transmission line along the existing Susquehanna to Roseland Transmission Line right-of-way (ROW) between the existing East Hanover/Roseland switching station in the Borough of Roseland, New Jersey and the Delaware River.

New Jersey Turnpike Authority, Garden State Parkway Interchange 10 Improvements Project, Cape May County. Senior scientist. Assisted in the completion of a wetland delineation along the length of the Garden State Parkway encompassing Interchanges 9, 10, and 11, as well as auxiliary roads and parcels, pursuant to the procedures outlined in the U.S. Army Corps of Engineers 1987 Manual and the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Responsible for the compilation and submittal of applications to the NJDEP for a Letter of Interpretation – Line Verification and the USACE, Philadelphia District for a Jurisdictional Determination, Freshwater Wetland General Permit No. 12, NJDEP Freshwater Wetland Individual Permit, CAFRA Permit, Waterfront Development Permit and a Coastal Wetland General Permit . Also responsible for addressing natural communities, including tidal and freshwater wetlands, and threatened and endangered species issues for incorporation into the Feasibility Assessment Report to determine Initially Preferred Alternatives for each interchange, as well as potential Alternative Access Schemes.

ADDITIONAL INFORMATION (FOR INFORMATION ONLY)

Education
MS, Environmental Soil Science with a minor in Water Resources, Oregon State University, 1999
BS, Soil and Water Resources, University of Rhode Island, 1998

Registrations/Certifications
Professional Wetland Scientist license # PWS #00001440

Professional Affiliations/Associations
Soil Science Society of America (SSSA), member

Training
Advanced Problems in Hydric Soil Evaluations, North Carolina State University
Endangered and Threatened Species of Southern New Jersey, Rutgers, 2010
Wetland Delineation, Hydric Soils, 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual

Security Clearance
Please contact Marilynne Gisin for current clearance level

Office Location
Morristown, New Jersey