

**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
OCEANVIEW 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

1 **I. INTRODUCTION AND BACKGROUND**

2
3 **Q. Please state your name and business address.**

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

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

7 A. I am employed by The Louis Berger Group, Inc. (“Louis Berger”), as a Principal
8 Environmental Scientist in the Energy Services Division of the Planning,
9 Facilities, and Resource Management Business Unit.

10 **Q. Please describe your professional experience and educational background.**

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

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

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

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

11 Attached as Exhibit KMC-1 is my curriculum vitae.

12 **Q. Have you previously testified in Board of Public Utilities (“Board” or**
13 **“BPU”) proceedings?**

14 A. No.

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

17 A. No.

18 **Q. Would you describe the purpose of your testimony?**

19 A. I am testifying on behalf of Jersey Central Power & Light Company (“JCP&L” or
20 the “Company”), and the purpose of my testimony is to describe the
21 environmental impacts and permitting process for the proposed Project route, a
22 230 kilovolt (“kV”) high voltage transmission line beginning at the JCP&L
23 Larrabee substation in Howell Township, Monmouth County, New Jersey, and

1 ending at the Oceanview substation in Neptune Township, Monmouth County,
2 New Jersey. My testimony describes the potential environmental impacts
3 associated with the Project and the necessary permits required.

4 **II. DESCRIPTION OF THE ENVIRONMENTAL PERMITTING PROCESS**

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

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

11 1. NJDEP Division of Land Use Regulation (“DLUR”) Freshwater Wetland
12 Letter of Interpretation (“LOI”). The LOI confirms the boundaries and
13 resource value classification for freshwater wetlands, transition areas, and/or
14 State open waters within the existing transmission line right-of-way (“ROW”).
15 JCP&L will be submitting an application to the NJDEP DLUR for an LOI in
16 the first or second quarter of 2014. The application should take approximately
17 90 calendar days to process by the NJDEP.

18 2. NJDEP DLUR Freshwater Wetlands and Flood Hazard Area Control Act
19 Permits. These permits are required for all activities located within regulated
20 areas including freshwater wetlands and associated transition areas, streams,
21 floodplains and riparian zones. JCP&L will submit applications with the

NJDEP for both a freshwater wetland general permit,¹ a freshwater wetland individual permit,² and a flood hazard area individual permit³ in the summer of 2015. Permit applications are expected to be submitted to the NJDEP in the third quarter of 2015. 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). RFA permits 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

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 21 (Above Ground Utility Lines). The General Permit 21 authorizes the installation of poles, towers, or other supports from which to suspend a pipe, wire or cable; construction of pad mounted transformer; clearing of vegetation under and around utility lines; and minor, temporary disturbances necessary for access during construction in freshwater wetlands, transition areas, and/or State open waters. For project to be eligible for a General Permit 21, temporary disturbance must be less than 60 feet wide, and the total permanent disturbance must be less than a ½ acre or 20 feet wide.

² Transmission line projects that will impact greater than ½ 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.

³In 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.

1 expected in June 2016. Applications submitted using the NJDEP
2 Stormwater Construction E-permitting system are processed within 24 hours.

- 3 4. New Jersey Department of Transportation Highway Occupancy Permit. The
4 permit is required for the crossing of any State or Federal highway, including
5 Interstate 195, Route 18, etc. The Highway Occupancy Permit applications
6 are expected to be submitted to the NJDOT in the third quarter of 2015. The
7 NJDOT will determine if an application is deemed administratively complete
8 within 45 days of receipt. If the application is deemed complete the NJDOT
9 shall have a maximum application review time of 45 days within which to
10 approve or deny the application. The NJDOT may extend this review time for
11 permits for longitudinal installations over 660 feet (0.125 miles) long.

- 12 5. New Jersey Turnpike Authority (“NJTA”) License To Cross Applications. A
13 License to Cross (“LTC”) is a legal document that grants permission to
14 outside parties to impact New Jersey Turnpike Authority property. The
15 Garden State Parkway is owned and operated by the NJTA. Licenses to Cross
16 are granted for permanent installations such as utility crossings, and for
17 temporary impacts, such as construction easements. If the application is
18 deemed complete the NJTA, applications are typically approved within 6
19 months.

- 20 6. Freehold Soil Conservation District Certificate of Soil Erosion and Sediment
21 Control (“SESC”). A certificate of SESC is required for all activities
22 associated with soil disturbances greater than 5,000 square feet. SESC Plans

are expected to be submitted to the Freehold Soil Conservation District in the fourth quarter of 2015. SESC Plans are reviewed within 30 days of receipt.

7. Local construction permits. Local construction officials are required to approve foundations and structural steel for the transmission structures. Local construction permit applications will be submitted to the various municipalities during the fourth quarter of 2015. Local construction permits are typically approved within 30 days.

8. 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)):

1. 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;
2. 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;
3. 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;

1 4. Proposed projects including new, replacement, reconstructed, or
2 rehabilitated bridges or culverts; and

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

6 In addition, as part of the NJDEP Permitting process, JCP&L will be
7 coordinating with numerous agencies including, but not limited to: NJDEP
8 Division of Parks and Forestry (portion of Project through Allaire State Park), US
9 Fish and Wildlife Service (“USFWS”), and the NJDEP Endangered and Non-
10 game Species Program.

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

13 A. Permit applications including NJDEP Freshwater Wetland General/Individual
14 Permit, Flood Hazard Area Individual Permit, SESC Approval, NJDOT
15 Occupancy Permit and local construction permits require submittal of design
16 plans. In order to determine the acreage of permanent and temporary impacts to
17 regulated areas (freshwater wetlands, transition areas, open waters and riparian
18 zones), final design (approximately 90%) including foundation size, access roads,
19 laydown areas and pulling areas, is required. Final design of the project is not
20 expected until winter 2014.

21 Final design plans are not required for the NJDEP Freshwater Wetland
22 LOI Application. The Company will be submitting the NJDEP Freshwater
23 Wetland LOI Application in the first or second quarter of 2014.

1 **Q. Are there any freshwater wetlands located within the Project Area?**

2 A. Yes, freshwater wetlands were delineated within the project area and include
3 emergent, scrub-shrub and forested wetlands. During late summer and fall 2013,
4 wetlands were delineated by Louis Berger in accordance with the procedures
5 outlined in the 1989 Interagency Federal Manual for Identifying and Delineating
6 Jurisdictional Wetlands.

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

8 A. Yes, the Project will include crossing approximately six different streams
9 identified by the National Hydrography Dataset (“NHD”), and in specific
10 locations will cross the same stream more than once. The Project will cross
11 several Category One Waters including the Manasquan River, Mingamahone
12 Brook, Shark River Brook, and Squankum Brook and their tributaries. Long term
13 impacts to the water crossings would typically be associated with the loss of
14 shading due to the clearing of vegetation along banks of impacted streams.
15 However, because the Project will be constructed within the existing ROW
16 clearing will be minimal; resulting in minimal additional impacts to existing
17 stream corridors. As part of the permitting process, JCP&L will apply for and
18 obtain a NJDEP Flood Hazard Area Permit for potential impacts to floodplains
19 and riparian areas. If required by the NJDEP, compensatory mitigation will be
20 provided.

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

1 A. Yes, the NJDEP Landscape mapping data has identified potentially suitable
2 habitat for listed species within the Project area. Previous studies completed in
3 support of the Atlantic – Larrabee re-conducting project were reviewed, including
4 the Knieskern’s beaked-rush surveys report (dated December 2011) and bog turtle
5 survey report (dated July 2008).

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

10 **III. MITIGATION OF ENVIRONMENTAL IMPACTS**

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

12 A. Yes. The Project will result in impacts to freshwater wetlands, transition areas
13 and riparian areas. Project-related impacts to regulated areas will be avoided to
14 the maximum extent practicable. Where impacts cannot be avoided, measures
15 will be implemented to minimize impacts. Compensatory mitigation will be
16 proposed for the purpose of mitigating unavoidable Project-related impacts.

17 JCP&L and the Routing Team selected Alternative Route C as the
18 Preferred Route. Route C best minimizes the overall effect of the Oceanview
19 transmission line on the natural and human environment while avoiding
20 unreasonable and circuitous routes, unreasonable costs, and special design
21 requirements. JCP&L witness Timothy B. Gaul from Louis Berger will provide a
22 detailed explanation of the route selection process and analysis.

1 **Q. Please describe what actions have been and will be taken to minimize**
2 **environmental impacts.**

3 **A.** JCP&L has made numerous efforts to first avoid and then minimize potential
4 environmental impacts associated with the Project. Key efforts include:

- 5 1. The decision to select Alternative Route C as the Preferred Route. The
6 entire 16.2-mile-long route would be constructed within existing
7 maintained transmission ROW. Therefore, Route C will require fewer
8 acres of forest clearing than the other alternatives.
- 9 2. Once the Preferred Route was selected, field studies including a wetland
10 delineation (completed), and threatened and endangered species habitat
11 assessments (ongoing) were conducted to determine the exact location of
12 sensitive natural resources within the project area.
- 13 3. During the preliminary design phase every attempt to restrict disturbance to
14 within the existing maintained ROW will be made, so as to minimize
15 permanent impacts to wetlands, forested areas and other critical areas.
16 Existing wetland delineation geographic information system (“GIS”) data,
17 NJDEP Landscape Data, NJDEP mapped floodplain, and flood hazard area
18 riparian areas will be placed on the base design maps to aid in determining
19 the location of access roads and transmission structures. Critical areas
20 were spanned aerially wherever feasible. For the rebuild portion of the
21 Project, placement of the new structures will be within the vicinity of the
22 existing structures to avoid additional areas of impact.

1 During construction, a number of vegetative and engineered erosion and
2 sediment control measures will be implemented to avoid sediment migration to
3 regulated areas on- and off-site. Vegetative soil erosion control measures include
4 maintenance of existing vegetation, permanent vegetative cover for soil
5 stabilization, temporary vegetative cover for soil stabilization, and the protection
6 of existing trees and vegetation during construction. Engineered soil erosion
7 control measures include dust control, slope protection matting, and stabilized
8 construction access. Only selected vegetation will be cleared and grubbed.
9 Clearing and grubbing will be limited to what is initially necessary to install
10 access roads or until such time as work is scheduled for that area. Ongoing
11 maintenance of all soil erosion and sediment control measures will ensure their
12 proper function and operation.

13 Temporarily disturbed areas will be restored to their pre-existing
14 conditions. Depending upon the extent of disturbance, areas requiring
15 revegetation will be seeded with grass (e.g., annual ryegrass) to stabilize disturbed
16 soils and some areas will be allowed to naturally revegetate. If the disturbed area
17 is located within a wetland, the area may be seeded with wetland seed mix to
18 stabilize the ground and prevent erosion until natural vegetation is re-established.
19 If the disturbed area is located within an erosion hazard area, the area will be
20 restored to pre-existing contours and stabilized by seeding with wetland seed mix
21 for wetland areas and seeding with annual ryegrass for upland/transition areas. In
22 all other areas, the disturbed area will be restored to pre-existing contours and will
23 be allowed to naturally revegetate to avoid the potential for introducing

1 undesirable species by seeding. If there is likelihood that phragmites or other
2 undesirable species could invade the disturbed area, then the area should be
3 replanted with appropriate native species. Revegetation with native species is
4 required only when disturbance within the work area has resulted in the
5 permanent destruction of vegetation and disturbance to the soil which would
6 preclude natural revegetation within one growing season.

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

10 **Q. Are there any environmental impacts associated with Project construction**
11 **activities at the Oceanview and Larrabee substations?**

12 A. Preliminary design indicates that proposed improvements at both the Oceanview
13 and Larrabee substations to accommodate the new equipment and connection to
14 the Project will result in impacts to upland areas. Any such disturbances will be
15 located on land currently owned by JCP&L.

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

18 A. The entire 16.2-mile-long route would be constructed within existing maintained
19 transmission ROW. Although the existing ROW is currently maintained in
20 accordance with JCP&L's vegetation management program, additional clearing
21 within the ROW will be necessary in certain areas where the ROW is not
22 currently cleared to the full extent necessary for the new 230 kV line, or to
23 remove priority trees. Although JCP&L can construct the entire line within the

1 existing easement, JCP&L may seek additional tree clearing rights in certain
2 areas. If additional tree clearing rights are not granted, JCP&L can design the line
3 within the existing ROW to meet National Electrical Safety Code (“NESC”)
4 clearance requirements.

5 **Q. Does this conclude your direct testimony?**

6 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 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

