

New Transmission Line Gloucester to Cuthbert Boulevard 230kV



Public Service Electric & Gas

2/27/2015

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A. Executive Summary

- This report summarizes the conceptual analysis for the proposed Public Service Electric & Gas (PSE&G) New Transmission Line from Gloucester to Cuthbert Boulevard 230kV Proposal.
- PSE&G's main office is located at 80 Park Plaza in Newark, New Jersey 07102 with additional offices, operations and maintenance facilities stretching from the New York to Philadelphia metropolitan areas.

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- PSE&G's pre-qualification document is on record, submitted June 21, 2013 under PJM ID# 13-07.
- PSE&G maintains that the intent of this proposal is to seek designation to construct, own, operate, maintain, and finance the proposed project, or some portion, as the designated entity for the proposed project.

B. Company Evaluation information

1. Experience

PSE&G's experience was provided in the pre-qualification document submitted June 21, 2013 under PJM ID# 13-07.

2. Right-of-Way and Property Acquisition

As part of its regular utility business, PSE&G has about 865 miles of right-of-way. Some are owned in fee and others take the form of easements. In addition, PSE&G as an electric public utility regulated by the New Jersey Board of Public Utilities (BPU) has the right to build in public right-of-way in the State of New Jersey and also has the right of condemnation under applicable New Jersey law.

PSE&G has years of experience in undertaking the various processes necessary to secure certificates of public convenience and necessity and in acquiring the necessary right-of-way needed to site facilities, including experience in exercising eminent domain authority.

PSE&G has extensive experience in land acquisition and negotiations associated with all types of utility projects including transmission. PSE&G has an internal Corporate Properties staff responsible for the oversight and management of the corporation's real estate assets including the purchase and sale of property rights, leasing or licensing company owned property to or from third parties, and handling day-to-day property maintenance issues that may arise

PSE&G has extensive in-house expertise to handle acquisition of property for large transmission projects. PSE&G also hires the services of outside vendors

PSE&G has an in-house Environmental Projects and Permitting Group dedicated to gaining approvals and dealing with environmental issues for electric transmission and distribution projects.

3. *Financing*

PSE&G maintains solid investment grade credit ratings. This allows us consistent access to the capital markets on reasonable terms. Our current senior secured credit ratings from S&P and Moody's are A and Aa3 respectively.

C. Proposed Project Constructability Information

1. Project Scope

[Redacted]

a. New Transmission Line Details

Terminal points

[Redacted]

A general description of alternative routes or routing study area

[Redacted]

Geographic description of any terrain traversed by the proposed new line or the study area

[Redacted]

Route description by segment that includes lengths and widths and that classifies by:

[Redacted]

- New right-of-way to be acquired – [Redacted]
- Expansion of existing right-of-way – [Redacted]

Electrical characteristics

- Nominal voltage rating – [Redacted]
- AC or DC – [Redacted]
- Line MVA normal and emergency rating – [Redacted]
- Grounding design for underground or submarine circuits – [Redacted]
- Equipment ratings – [Redacted]
- Line impedances – [Redacted]
- Total mileage – [Redacted]

Physical characteristics

- **Line and shield conductor type and size** – [REDACTED]
- **Overhead or underground/submarine** – [REDACTED]
- **Single or double circuit towers** – [REDACTED]

Geographic map with proposed transmission line analysis area superimposed



Figure 1: [REDACTED]



Figure 2: [Redacted]

b. New Station Details

General description of the proposed location(s)

[Redacted]

c. Transmission Facilities to be Constructed

[Redacted]

c.1. Transmission Line Relocation

[Redacted]

c.2. [Redacted]

One-line diagram and general arrangement drawing



Figure 3: [Redacted]



Figure 4: [Redacted]

Protection and controls plan

[Redacted]

General description of the proposed expansion

[Redacted]

Land ownership in vicinity of proposed expansion

[Redacted]

Electrical design including specifications and ratings for transformers or reactive devices

Equipment Ratings – [Redacted]

c.3.

One-line diagram and general arrangement drawing



Figure 5:



Figure 6:

Protection and controls plan

[Redacted]

General description of the proposed expansion

[Redacted]

Land ownership in vicinity of proposed expansion

[Redacted]

**Electrical design including specifications and ratings for transformers or reactive devices
Equipment Ratings – [Redacted]**

d. Environmental, Permitting and Land Acquisition

[Redacted]

[Redacted]

[Redacted]

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PSE&G Confidential and Proprietary Information

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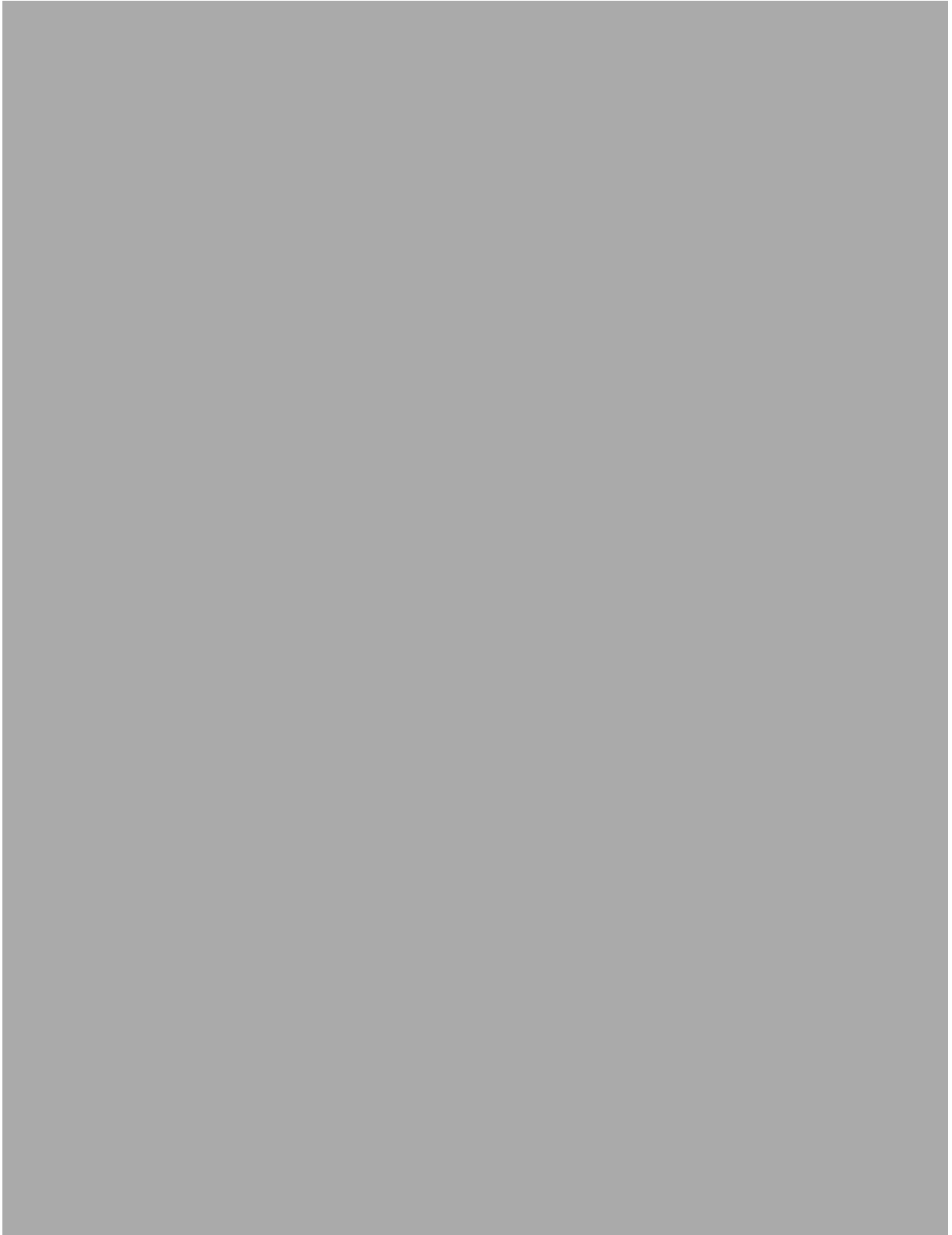
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2. Project Component Cost Estimate



Table 1: 

3. Schedule



4. On-going Transmission Facility Items

a. Operational Plan

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b. Maintenance Plan

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5. Assumptions

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PSE&G Confidential and Proprietary Information

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D. Proposed Project Results and Technical Information

1. Scope of Project

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Table 2:

2. Analysis

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3. Additional Benefits

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4. 2014/15 Long-Term Window Proposal



E. Attachments

1. Separately Provided Files (IDev, Case, Contingency Files & Slider Diagram)

Files transmitted electronically under separate cover.