

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on October 17, 2019

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Diane X. Burman
James S. Alesi
Tracey A. Edwards
John B. Howard

CASE 19-E-0122 - Petition of Ravenswood Development, LLC for an Original Certificate of Public Convenience and Necessity and for an Order Providing for Lightened Regulation.

ORDER GRANTING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
AND PROVIDING FOR LIGHTENED REGULATION

(Issued and Effective October 17, 2019)

BY THE COMMISSION:

INTRODUCTION

Ravenswood Development, LLC (Ravenswood Development) proposes to construct and operate an energy storage facility with a capacity of up to approximately 316 MW in Long Island City, Queens, New York (the Storage Facility). On February 21, 2019, Ravenswood Development filed a petition with the Public Service Commission (Commission) requesting: (1) a Certificate of Public Convenience and Necessity (CPCN) pursuant to Public Service Law (PSL) §68; and (2) approval of a lightened ratemaking regulatory regime. In this Order the Commission grants a CPCN with conditions and authorizes lightened ratemaking regulation.

THE PETITION

Ravenswood Development

Ravenswood Development is a limited liability company organized under the laws of Delaware and registered in New York. Ravenswood Development is a wholly-owned subsidiary of Helix Generation, LLC (Helix Generation).¹ According to Petitioner, Helix Generation is lightly-regulated by the Commission with respect to its indirect ownership of electric generation units located in Long Island City, Queens, on the same property where the Storage Facility would be sited (the Ravenswood Generation Station).

Helix Generation was formed to directly or indirectly acquire and hold the membership interests of the entities that own and/or operate electric generating units located at the Ravenswood Generation Station. Ravenswood Development avers that Helix Generation is a direct subsidiary of LS Power Equity Partners III, L.P. and an indirect subsidiary of, and wholly-controlled by, LS Power Development, LLC (LSP Development).

According to Petitioner, LSP Development develops, owns, and operates independent power projects and transmission projects in the United States. Ravenswood Development represents that neither LSP Development nor its subsidiaries own or control generation facilities in the wholesale markets administered by the New York Independent System Operator, Inc. (NYISO) other than the units operating within the Ravenswood Generating Station. LSP Development, however, does have indirect subsidiaries that own or control generation facilities

¹ Supplemental information provided by Petitioner on October 3, 2019 corrected the Petition by noting that Ravenswood Development is a direct, wholly-owned subsidiary of Helix Generation, and affiliated with Helix Ravenswood, LLC.

in neighboring markets administered by PJM Interconnection (PJM) and ISO New England, Inc. (ISO-NE).

LSP Development, Petitioner continues, is affiliated with LifeEnergy, LLC (LifeEnergy). This affiliate is a power marketing company that provides energy products and services to residential and commercial customers in Texas and certain mid-Atlantic states. Ravenswood Development states that LifeEnergy might expand operations into New York but does not own generation or transmission assets within the NYISO markets. Petitioner represents that LifeEnergy would not market the Storage Facility's capacity. LSP Development also is affiliated with Enterwise Global Technologies, Inc. (CPower), which provides demand-side energy management services to commercial, industrial, and governmental organizations. Ravenswood Development represents that CPower would not market the Storage Facility's energy.

Storage Facility

Facility Site and Existing Generation

The Ravenswood Generating Station consists of approximately 27 acres of land located in Long Island City, Queens, New York. According to Ravenswood Development, the land is zoned industrial for heavy manufacturing purposes within an M3-1 district. The Storage Facility would be located on an approximately seven acre portion (the Storage Facility Site) located in the northern section of the Ravenswood Generating Station. Ravenswood Development and Helix Ravenswood would enter into an agreement that allows Petitioner to develop the Storage Facility on this land.

The Storage Facility Site, Petitioner continues, is bordered by the Roosevelt Island Bridge Access and Consolidated Edison Company of New York, Inc. (Con Edison) Rainey Substation to the north, Vernon Boulevard to the east, the main Ravenswood

Generating Station to the south, and the East River to the west. Ravenswood Development notes that Con Edison's Vernon Substation is adjacent to the southern border of the Ravenswood Generating Station property.

According to Ravenswood Development, the Storage Facility Site is relatively flat with a gentle slope from east to west across the property. Surface elevations range from approximately nine feet above mean sea level (MSL) along the western edge of the Storage Facility Site, to approximately 20 feet above MSL along Vernon Boulevard. Storm water runoff generally flows from east to west towards the East River, except where blocked by the generating units. Storm water can percolate into the ground in areas with stone cover.

Ravenswood Development avers that Helix Ravenswood owns the real property at the Ravenswood Generating Station, and owns or holds a leasehold interest in, and operates, the existing generating facilities at that site. Existing facilities include Units 10 and 20, which commenced operations in the early 1960's and have an aggregate capacity of approximately 800 MW. Unit 30 has a capacity of approximately 1,027 MW and commenced operations in the mid-1960's. Units 10, 20, and 30 operate primarily on natural gas, with low-sulfur No. 6 fuel oil used as a backup.²

Unit 40, Ravenswood Development continues, has a capacity of approximately 250 MW and commenced operations in 2004.³ Petitioner notes that Unit 40 Sublessor, LLC (Unit 40 Sublessor) is affiliated with Helix Ravenswood and owns a small

² Petitioner notes that it is transitioning the backup fuel supply for these Units to No. 4 fuel oil, then to No. 2 fuel oil.

³ Case 99-F-1625, KeySpan Energy, Opinion and Order Granting Certificate of Environmental Compatibility and Public Need (issued September 7, 2001).

interest in Unit 40. This generating facility runs primarily on natural gas, with backup fuel provided by ultra-low sulfur No. 1 or 2 distillate fuel oil. The Storage Facility would be located north of Unit 40 and outside of its footprint.

Ravenswood Development reports that the Ravenswood Generating Station also includes peaker units with a total capacity of approximately 394 MW that commenced operations between 1967 and 1970. Sixteen of these gas turbines (GTs), with an aggregate capacity of approximately 376 MW, are located within the Storage Facility Site and would be demolished.⁴ This includes GT10 and GT11, which are in service and used infrequently; the other 14 units are not currently in service. Petitioner represents that full build-out of the Storage Facility would result in approximately 316 MW of gas-fired generating capacity being replaced with an equivalent amount of energy storage capacity.

Petitioner avers that Con Edison owns the Boiler "A" House and other utility assets on a portion of the Ravenswood Generating Station property that it leases from Helix Ravenswood. Petitioner represents that the Energy Storage Facility would not impact operation of Con Edison's infrastructure.

Storage Facility

Ravenswood Development proposes to construct, own, and operate stand-alone battery-based energy storage facilities on a portion of the Ravenswood Generating Station property. The facility would be capable of supplying up to a maximum of eight hours of storage capacity at its rated output, and charge and

⁴ Ravenswood Development reports that these units are GT04, 05, 06, 07, 08, 09, 10, 11, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, and 3-4.

discharge at up to 316 MW of power. Petitioner states that the Storage Facility would provide peak capacity, energy, and ancillary services in New York City while enhancing grid reliability. The New York Board on Electric Generation Siting and the Environment previously determined that the proposed Storage Facility is not subject to PSL Article 10 because "stand-alone battery storage facilities not associated with the development of new electric generating facilities are not subject to Article 10 review."⁵

The proposed facility would not generate any new electricity. Instead, it would store electricity withdrawn from the grid and generated at other facilities and inject stored energy back into the system pursuant to system operating requirements established by Con Edison and the NYISO. Petitioner avers that the Storage Facility and existing generating units at the Ravenswood Generating Station would operate independently, although all generating units might share maintenance and service personnel for efficiency.

Ravenswood Development explains that the Storage Facility would consist of lithium-ion batteries connected in series and in parallel. Each battery module, Petitioner continues, would be a sealed Underwriters Laboratory listed product that is installed as a component in battery racks inside a building. The racks would be bolted to the floor. Safety systems would be integrated into each module to enable active monitoring of critical parameters. Petitioner explains that the monitoring would be used to optimize battery performance and enable early detection and mitigation of potential failures. The batteries would not vent or release emissions, nor will they be opened on-site for use, maintenance, or other purposes.

⁵ Case 18-F-0204, Helix Ravenswood, LLC and EnergyStorageCo, Letter (issued June 22, 2018).

Ravenswood Development plans to install a Relay and Communications system for automated battery monitoring and management to ensure design performance and system life.

Batteries for the Storage Facility would be installed in three buildings and connected to bi-directional, skid-mounted battery inverters. Ravenswood Development reports that the inverters are expected to be located outside in a weatherproof enclosure. They would connect to the batteries via cable trays or underground conduit inside the buildings, and cable trays, underground conduit, or buried cables outside the buildings. The final project design, however, might require some inverter units to be located inside the buildings. Petitioner notes that the current project design includes up to 136 inverters connected in pairs of up to 68 generator step-up transformers. The transformers would connect to two larger substation step-up transformers via underground cables and two switchgears.

The Storage Facility's step-up transformers would connect to a new 345 kV and/or 138 kV gas insulated substation (GIS) that would be licensed, constructed, owned, and operated within the existing Ravenswood Generating Station by Con Edison. Ravenswood Development represents that it, and not Con Edison or its ratepayers, would bear all costs associated with substation construction. This interconnection would be licensed, constructed, owned, and operated by Con Edison pursuant to an Interconnection Service Agreement with the NYISO. The GIS substation would be located near the Storage Facility.

Ravenswood Development asserts that the Storage Facility would be designed and constructed in accordance with all applicable codes and requirements. The battery buildings would include fire suppression equipment and related systems as required by the fire code. The Petition presents a list of

engineering codes, standards, and guidelines that would apply to Storage Facility design, development, and construction.

The Storage Facility, Ravenswood Development asserts, would reduce the need for additional generation during peak demand periods. The batteries also could provide ancillary services to the grid including, for instance, reserves, regulation, and voltage support. Petitioner argues that the Storage Facility would not cause or require any direct emissions to air or any wastewater discharges. It would require water for operations only to support its fire suppression systems and, potentially, its heating, ventilation, and air conditioning systems. Ravenswood Development notes that the Storage Facility would use existing grid infrastructure.

Ravenswood Development represents that the Storage Facility would be repurposed or decommissioned after either the Storage Facility has ceased operations at the end of its useful life, which is anticipated to be 30 years, or it has been abandoned for a period that exceeds one year. Repurposing would retain the battery buildings for future use while removing and disposing of other equipment. Ravenswood Development states that decommissioning would result in the Storage Facility Site being restored "to a condition comparable to or improved to that which existed prior to" construction.

Phased Development

Ravenswood Development anticipates constructing the Storage Facility in three phases: (1) 1st Phase: Southeast Building, up to 129 MW energy storage capacity; (2) 2nd Phase: North Building, up to 98 MW energy storage capacity; and (3) 3rd Phase: Southwest Building, up to 89 MW energy storage capacity. Up to 16 existing peaker units and associated equipment would be demolished to accommodate the Storage Facility, thereby

replacing up to 316 MW of peaking unit capacity with storage capacity.⁶ An existing office building and temporary storage facility also would be demolished and removed, and certain existing structures (e.g., fire hydrants) would be relocated.

According to Ravenswood Development, construction would require an average of 100 to 120 workers on site each day. Petitioner will develop an on-site parking plan for construction workers. Construction activities are anticipated to occur primarily on weekdays between the hours of 7:00 a.m. and 6:00 p.m. Ravenswood Development would obtain authorization required under the New York City Code as needed to engage in construction work in other hours. In addition, Petitioner represents that it has obtained necessary municipal consents to construct, operate, and maintain the facility.

Ravenswood Development anticipates that the first phase of the Storage Facility would commence commercial operations in March 2021. The construction schedule for subsequent phases has not been determined and would be established based on factors including governmental rules, incentives, and market initiatives.

Storage Facility construction and operation would require a variety of federal, state, and local regulatory actions. According to the Petition, reviews, actions, permits, and approvals would be required from the Commission, New York State Department of Environmental Conservation (NYSDEC), New York State Office of Parks, Recreation, and Historic Preservation (NYS OPRHP), City of New York (City), NYISO, and the U.S. Fish and Wildlife Service (USFWS). Ravenswood Development reports that it filed interconnection requests with the NYISO for 129 MW and 187 MW in April 2019. NYISO completed

⁶ Of the 16 units to be demolished, only GT 10 and GT 11 are currently in service.

the study in July 2019, concluding that the Storage Facility would not adversely impact system reliability. Ravenswood Development anticipates entering the 129 MW interconnection request into the NYISO's 2019 Class Year Facilities Study.

Potential Environmental Impacts

Ravenswood Development's Petition included an Expanded Environmental Assessment that provided a comprehensive analysis of potential environmental impacts associated with Storage Facility construction and operation. According to Ravenswood Development, the Storage Facility would not result in any significant adverse environmental impacts. Ravenswood Development contends that the project would be compatible with existing land uses and would avoid or minimize adverse effects to air quality, water resources, noise, traffic and transportation, visual resources, community facilities, and natural resources. The Petition and Environmental Assessment present and summarize Petitioner's analysis of these issues, as follows.

Existing Land Uses

Ravenswood Development asserts that the Storage Facility is compatible with existing land uses within a quarter-mile radius of the Facility Site and would not have a significant adverse impact on land use. The facility would be located on a portion of the Ravenswood Generating Station that has hosted numerous electric generating units for many years. Ravenswood Development contends that the Storage Facility simply continues the sites' existing land use.

NYC Zoning Resolution - M3 District Use Regulations

The Facility Site, Ravenswood Development reports, is located in an M3-1 district that is zoned for industrial or heavy manufacturing purposes. These activities are designated for areas with heavy industries that generate noise, traffic, or

pollutants. Ravenswood Development contends that the Storage Facility would be consistent with typical land uses in M3-1 districts, which include power plants. The Storage Facility also fits within a classified use group that includes electric utility substations and electric power generating plants. Ravenswood Development argues that energy storage facilities are permitted as-of-right within M3-1 districts.

NYC Zoning Resolution - M3 District Performance Standards

According to Ravenswood Development, the City Zoning Resolution specifies performance standards for M3 use districts that address noise, vibration, smoke and emissions, dust, toxic matter, fire and explosive hazards, and humidity, heat, and glare. Ravenswood Development contends that the Storage Facility would satisfy all applicable performance standards.

Petitioner explains that the Storage Facility would use batteries classified as a Class I material that is allowed in manufacturing zones. Fire suppression equipment that meets or exceeds applicable fire safety codes and standards would be installed in the battery buildings.

The Storage Facility would produce noise from air conditioning units, inverters, transformers, and step-up transformers that is regulated under the City's Zoning Code and Noise Code. Ravenswood Development represents that the facility would utilize sound-attenuating enclosures to reduce noise from inverters and transformer skids. These measures, Ravenswood Development asserts, would result in noise levels consistent with performance standards established in the City's Noise Code and Zoning Resolution for manufacturing districts across all octave band frequencies. Petitioner maintains that the Storage Facility would not increase existing noise levels more than 3

dba, which is barely perceptible and below NYSDEC thresholds that trigger the need for additional mitigation.

Construction activities would also generate noise of varying levels. Petitioner represents that all construction activities would be conducted in full compliance with existing regulations. Construction equipment would meet specific state and federal noise emission standards and construction noise impacts would also be attenuated because construction activities would occur behind an approximately eight-foot brick security wall that runs along the property's perimeter.

NYC Zoning Resolution - Bulk Regulations

According to Ravenswood Development, the Storage Facility design would comply with applicable bulk and dimensional regulations. This includes requirements for floor area ratio and yard setbacks. Additional off-street parking or loading would not be needed because existing personnel would operate the Storage Facility and incremental loading activity can be accommodated within the current site layout.

The Storage Facility would be partially located within a Waterfront Block and a Flood Hazard Area. Ravenswood Development asserts that the Storage Facility would comply with bulk regulations applicable to projects located in these areas. The Storage Facility, Petitioner argues, is also consistent with the Local Waterfront Revitalization Plan.

Community Facilities and Services

Ravenswood Development contends that the Storage Facility would not displace or alter public or publicly-funded community facilities or services. Facility construction would require, at most, 100 to 120 workers and facility operations would rely on existing personnel at the Ravenswood Generating Station. Petitioner argues that these activities would have

only a minimal impact on the number of people using community facilities or services.

Cultural Resources

Petitioner reports that a cultural resources review was conducted under the New York State Historic Preservation Office (SHPO) Environmental Review Program. The review, Ravenswood Development continues, includes Section 106 of the National Historic Preservation Act of 1966, Section 14.09 of the Parks, Recreation, and Historic Preservation (PRHP) Law, and the State Environmental Quality Review Act (SEQRA). The Facility Site does not include any places listed on the National Register or State Register, although one such site is located within the quarter-mile study area. By letter dated December 4, 2018, NYS OPRHP Division of Historic Preservation confirmed that the Storage Facility would not impact archaeological or historic resources that are listed in, or eligible for listing in, the State or National Registries of Historic Places. The Storage Facility would be located adjacent to the Harbor Park NYS Heritage Area. Ravenswood Development maintains that the Storage Facility would be located entirely within the Ravenswood Generating Station and, therefore, it would not have any impact on cultural resources, including the Heritage Area.

Visual Resources

The Storage Facility, Ravenswood Development avers, would not have an adverse visual impact. Ravenswood Development explains that it conducted a visual impact analysis with respect to visual resources in a manner consistent with applicable NYSDEC guidelines. The Storage Facility would be located within the Ravenswood Generating Station and it would replace existing generation units, thereby avoiding or minimizing potential visual impacts. Street-level visibility from Vernon Boulevard and areas to the east would be limited by the site's sloping

grade towards the East River and an existing security wall. The sloping grade and 36th Street transition to the Roosevelt Island Bridge would limit visibility from the North. In addition, Ravenswood Development continues, existing peaking units and associated equipment would be replaced with buildings that are built to current code and architectural standards.

Socioeconomics and Environmental Justice

Ravenswood Development reports that, based on NYSDEC data, the Storage Facility is located within a Potential Environmental Justice (EJ) Area, and other Potential EJ Areas are within the quarter-mile study area. Petitioner argues that the Storage Facility would not have an adverse or disproportionate effect on Potential EJ Areas because it would: (1) improve air quality by reducing the number of combustion turbines; (2) have no significant adverse visual impact; and (3) comply with State and City noise standards.

Traffic and Transportation

The existing Ravenswood Generating Station is accessible by public transportation. Ravenswood Development reports that construction-related traffic would consist of commuting construction workers and deliveries of material and equipment. Parking and staging areas during construction would be accommodated within the Ravenswood Generating Station and deliveries would be scheduled throughout the day to avoid roadway peak hours. Ravenswood Development argues that these factors would limit the potential impact on traffic and avoid the need for any road improvements to support construction. Storage Facility operations would rely on existing employees and, therefore, would not impact traffic or transportation.

Contaminated Materials

Ravenswood Development reports that prior investigations of the Ravenswood Generating Station identified

contaminants including dense and light non-aqueous phase liquids (DNAPL and LNAPL, respectively), petroleum constituents, and other contaminants. Multiple spills of petroleum and other substances have been recorded at the Ravenswood Generating Station. The Ravenswood Generating Station hosts a network of 71 monitoring wells to monitor groundwater conditions. This includes LNAPL monitoring wells that would have to be relocated from the Storage Facility site. Ravenswood Development represents that it would obtain NYSDEC approval of a revised remediation work plan for well relocation before it commences construction of the Storage Facility. Remediation activities would continue as required and contaminated material present in excavated material would be discarded at a licensed facility or used on site subject to engineering and institutional controls.

Water Resources

Petitioner notes that the Storage Facility would be located next to the East River and, in part, within a Tidal Wetland that NYSDEC classified as a Littoral Zone. According to Ravenswood Development, Storage Facility construction and operations would be conducted behind an existing bulkhead that runs along the East River. Erosion and sediment controls would be used during construction as required by a Soil Erosion and Sediment Control Plan. After the Storage Facility commences operations, Petitioner continues, stormwater would be managed through an existing stormwater system and permit. The project would not impact wetlands or surface waters because neither feature is present on the Facility Site.

Floodplains

Parts of the Ravenswood Generating Station are located within 100-year and 500-year floodplains of the East River, according to flood insurance rate maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA). Petitioner asserts

that the 100-year floodplain elevation is 12 feet, and all Storage Facility structures within the flood hazard area would utilize a minimum design flood elevation of 14.5 feet, which is 2.5 feet above the base flood elevation. According to Ravenswood Development, this design standard would satisfy applicable code requirements.

Terrestrial Resources

Noting again that the Storage Facility would be located within the Ravenswood Generating Station, Petitioner avers that there is no suitable habitat for threatened or endangered species at the Facility Site. In addition, the Storage Facility is not expected to have an impact on terrestrial resources within and surrounding the Facility Site, which already is dedicated to industrial and utility uses.

Positive Environmental Impact

Ravenswood Development argues that the proposed Storage Facility would have a positive environmental impact. The Storage Facility, it claims, would reduce the need for fossil generation in New York City by making stored energy available during periods of peak electric demand. In addition, the Storage Facility would purportedly not cause or result in any direct emissions to air, process discharges to adjacent waterbodies, or sanitary discharges, and it would require water only to operate the fire protection system. Ravenswood Development avers that the Storage Facility would include a new GIS substation that would improve reliability of the City's electric grid. According to the Petitioner, the project would reduce or eliminate fossil fuel peaking facilities in the City and reduce emissions of Greenhouse Gases (GHGs) and other contaminants.

Public Benefits

Ravenswood Development contends that the Storage Facility would provide important public benefits because it furthers State policy objectives and promotes a modern and efficient energy system. Regarding State policy objectives, Ravenswood Development explains that the 2015 State Energy Plan recognizes that the State's energy system is designed to meet peak demand. The State Energy Plan, Petitioner continues, envisioned efficiency improvements in the State's electric system through solutions such as energy storage that reduce or shift peak load. Ravenswood Development avers that the 2015 State Energy Plan explicitly recognizes energy storage as part of a cleaner, more cost-effective energy system.

Ravenswood Development notes that the State Legislature enacted a law in 2017 which directed the Commission, in consultation with the New York State Energy Research and Development Authority (NYSERDA) and NYISO, to establish a 2030 statewide energy storage deployment goal and a policy to support it.⁷ In June 2018, Petitioner continues, the Energy Storage Roadmap was issued. The Energy Storage Roadmap identified the need to rapidly expand the State's energy storage capabilities. It provided a comprehensive strategy to promote the development of 1,500 MW of energy storage capacity by 2025, and up to 3,000 MW by 2030.

Ravenswood Development notes that the Commission issued its Storage Deployment Order in December 2018.⁸ In that Order, the Commission directed the State's utilities to issue requests for proposals (RFPs) in 2019 for energy storage

⁷ NY PSL §74.

⁸ Case 18-E-0130, Energy Storage Deployment Program, Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018) (Storage Deployment Order).

capacity. This included a specific requirement for Con Edison to procure at least 300 MW of storage capacity.

Petitioner argues that its project is consistent with, and would support, the State's objective to increase the deployment of energy storage systems. The Storage Facility could help satisfy Con Edison's storage procurement obligation, Ravenswood Development avers, as well as State goals to promote energy storage development, increase the amount of peak demand satisfied with clean energy resources, and improve overall system efficiency and utilization. It also would replace existing peaker units.

The proposed Storage Facility, Ravenswood Development continues, would also be consistent with City energy policies and goals. Ravenswood Development explains that the City announced a goal of reducing its GHG emissions 80 percent by 2050, as compared to 2005 emissions levels. The City also published a Roadmap that describes how these goals may be accomplished, including through increased reliance on energy storage. Ravenswood Development contends that the Storage Facility would support City policy objectives by eliminating GHG emissions from the existing fossil fuel peaker units that would be demolished and reducing the demand for fossil peaker units during periods of peak electric demand.

Ravenswood Development also notes that the Federal Energy Regulatory Commission (FERC) recently approved NYISO tariff amendments that create a market participation model for energy storage resources. The new rules integrate these resources into the day-ahead and real-time regulation service markets.

Finally, Ravenswood Development asserts that the Storage Facility would operate in a competitive wholesale market. The project would not pose a risk to ratepayers or City

residents, Ravenswood Development argues, and it would be constructed and operated to support safe, reliable, and adequate service. Ravenswood Development argues that the proposed Storage Facility is needed to further important State policy objectives and provide multiple system benefits. In addition, Petitioner continues, development of the Storage Facility would not present a risk of harm to captive utility ratepayers. For these reasons, Ravenswood Development requests that the Commission issue a CPCN pursuant to PSL §68 so that the company may own, construct, and operate the proposed Storage Facility. In addition, given that the Storage Facility would operate in a competitive wholesale market and not serve end-use customers, Ravenswood Development also requests that its ownership and operation of the Storage Facility be subject to lightened ratemaking regulation in a manner consistent with the regulatory regimes granted to other wholesale market participants.

PUBLIC NOTICE AND COMMENT

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking (Notice) concerning the request for lightened ratemaking regulatory treatment was published in the State Register on May 8, 2019 [SAPA No. 19-E-0122SP1]. The time for submission of comments pursuant to the Notice expired on July 8, 2019. No comments concerning the request for lightened regulation were received, although the City filed comments supporting development of the proposed Storage Facility based on its electric system benefits and consistency with municipal policy objectives.

On August 29, 2019, the Secretary to the Commission issued a Notice of Public Statement Hearing and Procedural Conference. A public statement hearing was held before Administrative Law Judge (ALJ) Anthony Belsito in Long Island City, Queens, New York on September 19, 2019. No comments were

received at the hearing. Ravenswood Development filed supplemental information responsive to DPS Staff information requests on October 14, 2019.

SUMMARY OF COMMENTS

City of New York

On July 8, 2019, the City filed comments supporting certification of the proposed Storage Facility. The City explained that it is working to create a resilient and low-carbon energy supply, improve air quality, and reduce GHG emissions by 80 percent from 2005 levels by 2050. It also adopted an energy storage resource deployment goal of 500 MW in New York City by 2025. The City explains that the proposed Storage Facility would further these policy objectives. According to the City, the Storage Facility can be a "valuable component" of its supply portfolio because energy storage resources: (1) promote reliability, given that the existing in-City generation fleet are of an advanced age and pollute heavily; (2) can replace fossil fuel peaker plants, including facilities that might retire if NYSDEC enacts tighter limits on emissions of nitrogen oxides; and (3) improve electric system resiliency.

Ravenswood Development Supplemental Information

On October 14, 2019, Ravenswood Development filed supplemental information. The supplemental filing included financial documents pertaining to Ravenswood Development and its corporate parent and the Ravenswood Development corporate structure.

PROCEDURAL MATTERS

On October 4, 2019, ALJ Belsito ruled that, based upon the positions expressed by DPS Staff and Ravenswood Development,

an evidentiary hearing was not needed to develop an adequate record in this proceeding. In so ruling, ALJ Belsito noted that no requests for a hearing had been received, and no information presented indicates that an evidentiary hearing is warranted. Consequently, ALJ Belsito ruled that no evidentiary hearing is needed before the Commission may rule on the Petition.

LEGAL AUTHORITY

PSL §68 prohibits an electric corporation from constructing electric plant, or from exercising any right or privilege under any franchise, until it receives the Commission's approval in a CPCN. Before the Commission may issue a CPCN, the electric corporation seeking approval must provide a certified copy of its charter and a "verified statement of the president and secretary of the corporation, showing that it has received the required consent of the proper municipal authorities." In considering its approval, the Commission "shall consider the economic feasibility of the corporation, the corporation's ability to finance improvements of a gas plant or electric plant, render safe, adequate and reliable service, and provide just and reasonable rates, and whether issuance of a certificate is in the public interest."⁹

The PSL grants the Commission broad authority to regulate corporations that own, operate, and/or manage electric plant, which is broadly defined by PSL §2(10). The regulation of electric corporations has been adapted over time to accommodate the development of competitive wholesale markets and lightened ratemaking regulation policies. The Commission has determined that lightly-regulated entities may be exempt from

⁹ PSL §68.

certain PSL provisions that pertain to retail service because they do not serve captive utility customers.¹⁰

DISCUSSION

Public Convenience and Necessity

PSL §68 requires an electric corporation to obtain a CPCN prior to the construction of electric plant, which is broadly defined under the PSL and encompasses the Project.¹¹ The Commission may grant a CPCN to an electric corporation after due hearing and upon a determination that construction of the electric plant is necessary and convenient for the public service. In this regard, the Commission's rules establish pertinent evidentiary requirements for a CPCN application.¹² They require a description of the plant to be constructed, the manner in which the costs of the plant would be financed, evidence that the proposed plant is in the public interest and is economically feasible, and proof that the applicant is able to finance the project and render adequate service. In addition, a petitioner must certify that it is authorized to provide electric service and document that it has obtained all necessary municipal consents.

Ravenswood Development has provided thorough information describing the proposed Storage Facility. The various aspects of the project design are described above and included in the record.¹³ Ravenswood Development describes its

¹⁰ See, e.g., Case 16-E-0409, Indeck Corinth Limited Partnership, Order Providing for Lightened regulation (issued December 21, 2016) at pp. 3-4.

¹¹ PSL §2(12).

¹² 16 NYCRR §21.1 et al.

¹³ The record in this case consists of the Petition, as supplemented, documents filed in the proceeding, and comments submitted in writing.

proposed financing arrangement for the Project as a combination of equity invested by its corporate parent and third-party debt.¹⁴ LSP Development, Petitioner's ultimate upstream owner, and its affiliates have an extensive record of profitably developing and operating electric generating facilities. This success is demonstrated in supplemental information submitted by Ravenswood Development, which provides further indicia that equity investment from one or more affiliated interests would be available to support Storage Facility development, operation, and maintenance.

Ravenswood Development intends to respond to Con Edison's RFP for storage capacity and participate in competitive wholesale markets to sell energy, capacity, and ancillary services from the Project. If Con Edison selects part or all of the Storage Facility capacity as a solution to its RFP, the payments received from Con Edison would increase the likelihood that Ravenswood Development is compensated for all products and services provided by the Storage Facility.¹⁵

The Storage Facility would be consistent with the 2015 State Energy Plan and advance the public interest. In particular, the Storage Facility would further various policy objectives identified in the most recent State Energy Plan update, as further developed in the Energy Storage Roadmap and Storage Deployment Order, to increase the deployment of energy storage resources and reduce GHG and total carbon emissions.

¹⁴ Ravenswood Development represented that it will seek Commission approval of debt issuances through a future petition pursuant to PSL §69.

¹⁵ The Commission notes that the decisions made in this Order are not intended to prejudge the outcome of Con Edison's RFP or to favor Ravenswood Development's Project over other potential responses to the RFP.

The Storage Facility would provide safe and adequate service. Ravenswood Development will be obligated to comply with various standards and measures for engineering design, construction, and operation. Any impacts on the electric system will be addressed through the NYISO's interconnection process. In fact, the NYISO already has determined that significant portions of the total potential Storage Facility capacity may be interconnected without presenting any risk to system reliability. Procedures for emergency response and facility maintenance will also be established. Storage Facility construction will be paired with the demolition of existing fossil generation units, and its operations are anticipated to support system reliability while reducing the need for fossil generation during periods of peak electric demand.

Ravenswood Development has demonstrated that it is authorized to provide electric service as a duly incorporated entity in good standing under the laws of Delaware. The company also is certified by the New York Department of State to do business in the State.

Ravenswood Development has obtained the requisite municipal consents from New York City. It also has demonstrated that its exercise of rights, privileges, or franchises under a CPCN is economically feasible. Ravenswood Development is a wholly-owned subsidiary of Helix Generation and an indirect subsidiary of LSP Development, its ultimate corporate parent. Both companies are part of a broader corporate organization that has a demonstrated record of success in developing, operating, and maintaining electric generating units. We grant the CPCN, in part, on the basis of Petitioner's representations that corporate affiliates will support Project development and construction as and when needed.

We conclude, based upon a thorough review of the record, that Ravenswood Development is financially viable and able to support Project construction, operation, and maintenance of the Storage Facility. The Commission also finds that Ravenswood Development has met the requirements of PSL §68 and that the construction and operation of the Storage Facility is necessary and convenient for the public service. Accordingly, we grant Ravenswood Development a CPCN along with appropriate conditions, as discussed and identified below, to protect the public interest and ensure safe, reliable, and adequate service.

Environmental Quality Review

Under SEQRA, Article 8 of the Environmental Conservation Law, and its implementing regulations, (6 NYCRR Part 617 and 16 NYCRR Part 7), all state agencies must determine whether the actions they are requested to approve may have a significant impact on the environment. Ravenswood Development submitted with their petition a Part 1 Environmental Assessment Form (EAF) and an Expanded Environmental Assessment. We have determined that the Petition constitutes an Unlisted Action and have opted to conduct an uncoordinated review. Parts II and III of the EAF and a Coastal Assessment Form were completed by DPS Staff and are retained in our files. A Notice of Determination of Significance and a supporting expanded EAF Part 2 evaluation are attached to this order. We conclude that issuing the CPCN to authorize construction, operation, and maintenance of the Storage Facility will not result in significant adverse environmental impacts.

Granting the Petition will permit Ravenswood Development to develop a stand-alone, battery-based energy storage facility of up to approximately 316 MW. The Storage Facility will be located within the existing Ravenswood Generating Station, an industrial facility with multiple

generating units dating back to the 1960's. The Storage Facility is consistent with the current industrial use of the Ravenswood Generating Station and is not in conflict with surrounding land uses, zoning, or community character. A NYC Waterfront Revitalization Program Constancy Assessment form was provided and is subject to a Constancy Determination by the City. Additionally, DPS Staff performed a Coastal Assessment pursuant Part Title 19 NYCRR Section 600.4 and did not identify any potentially significant impacts.

Noise, contaminated material, and storm water control were potential impacts that were identified during DPS Staff's environmental review. Ravenswood Development submitted an updated acoustical analysis and recommendations report in August 2019. The report illustrates that the Storage Facility will mitigate noise emanating from its inverters to levels that conform with New York City Noise Control Code Limits. Areas within the Ravenswood Generating Station contain contaminated materials resulting from operations of a former late nineteenth century manufactured gas plant and a petroleum spill that occurred prior to 2000. The site is currently under remediation. Construction of the Storage Facility will require monitoring wells to be relocated. To address potential impacts to remediation, a revised remediation work plan for well relocation will be developed by Ravenswood Development and submitted to NYSDEC for review prior to construction. Potential impacts from storm water will be addressed through the State Pollutant and Discharge Elimination System (SPDES) Permit Program administered by NYSDEC. Specifically, Storage Facility construction and operation will require a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity and an Individual SPDES Permit Modification. We therefore conclude that the Project will not result in significant adverse

environmental impacts. Our uncoordinated review, however, does not supersede any other State or local environmental review that might be required for other permits or approvals that Ravenswood Development must obtain prior to constructing the proposed Storage Facility.

Decommissioning

We agree with Ravenswood Development that the Facility Site should be restored to at least its present condition after its useful life has run or the facility has ceased operations or been abandoned for a period that exceeds one year. The following conditions are needed to ensure that Petitioner appropriately follows through on this commitment.¹⁶

Ravenswood Development must file within 90 days of the date of this Order a decommissioning plan that describes how and when Petitioner will decommission and restore the Facility Site. Within the same period Ravenswood Development must also file a decommissioning cost study that will be updated no more than 60 days after the Storage Facility Commercial Operation Date (COD) (i.e., when the facility commences commercial operations),¹⁷ and every three years thereafter. The decommissioning cost study must estimate the full cost that will be required to restore the Facility Site to its pre-construction condition. The Commission will establish the initial amount of this "Decommissioning Security" that Ravenswood Development must provide before commencing Storage Facility construction. The Commission subsequently may direct Ravenswood Development to adjust the Decommissioning Security if it concludes, based on a cost study

¹⁶ See, e.g., Case 18-E-0654, Ball Hill Wind Energy, LLC, Order Granting Certificate of Public Convenience and Necessity and Providing for Lightened Regulation (issued April 18, 2019) (Ball Hill Order).

¹⁷ COD for Phase 1 is anticipated to occur in or around March 2021.

update, that a modification is warranted. The Decommissioning Security will not reflect an offset for salvage or resale value of component parts. Ravenswood Development, and not its host community, should bear the risk of salvage value volatility that may cause the net decommissioning cost to exceed the Decommissioning Security value. Excluding this offset appropriately allocates most of the risk inherent in decommissioning to the project developer rather than the host communities.¹⁸

The Decommissioning Security should be paid directly to New York City, the host community, if it will agree to hold this financial instrument. This agreement should be obtained at least 90 days prior to construction and submitted for approval as a compliance filing. If New York City does not agree, Ravenswood Development shall obtain a third-party trustee to manage a standby trust perpetually until decommissioning is completed.

Furthermore, the Decommissioning Security provided to New York City or the trustee must be in the form of a letter of credit. The Storage Facility will have a useful life of at least 30 years. Decommissioning funds must be available to New York City, as the project's host community, over the entire course of the Storage Facility's useful life. Letters of credit provide certainty and security that the funds will be readily available if Ravenswood Development, or its successor-in-interest, is insolvent and cannot pay to decommission the Storage Facility.¹⁹ These conditions are intended to ensure that the Facility Site is fully restored if and when the Storage Facility permanently ceases commercial operations. They also

¹⁸ See, e.g., Ball Hill Order, p. 36.

¹⁹ Ball Hill Order, pp. 36-37.

are consistent with conditions recently imposed on other proposed supply resources seeking a CPCN,²⁰ and they limit potential uncertainty in the future as to the continuing obligation of electric plant owners to fully satisfy their decommissioning obligations even after their facilities have ended commercial operation.

Lightened Ratemaking Regulation

Ravenswood Development demonstrated that its ownership and operation of a merchant energy storage resource will not create the potential for the exercise of market power or other harm to captive ratepayers. The proposed Storage Facility does not present a potential market power risk because the capacity added by the Storage Facility will be offset by the demolition of a similar amount of affiliated capacity. The project, therefore, does not enhance the ability of Ravenswood development or its affiliates to exercise market power. The lightened regulatory regime that Ravenswood Development requests be applied to its wholesale electric operations is similar to that afforded to other comparably-situated wholesale market participants.²¹ Its request is therefore granted, to the extent discussed below.

In interpreting the PSL, the Commission has examined what reading best carries out the statutory intent and advances the public interest. The Commission thus concluded previously that new forms of electric service providers participating in competitive wholesale markets would be lightly regulated.²²

²⁰ See, e.g., Ball Hill Order, pp. 33-37; Case 14-F-0490, Cassadaga Wind, LLC, Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions (issued January 17, 2018) (Cassadaga Wind Order).

²¹ See, e.g., Ball Hill Order; Cassadaga Wind Order.

²² Case 98-E-1680, Carr Street Generation Station, L.P., Order Providing for Lightened Regulation (issued April 23, 1999)

Under this approach, PSL Article 1 applies to Ravenswood Development because it meets the definition of an electric corporation under PSL §2(13) and will be engaged in the sale and distribution of electricity under PSL §5(1)(b). It is therefore subject to provisions, such as PSL §§11, 19, 24, 25, and 26, that prevent producers of electricity from taking actions that are contrary to the public interest.

All of Article 2 is restricted by its terms to the provision of service to retail residential customers, and so is inapplicable to wholesale generators like Ravenswood Development. Certain provisions of Article 4 are also inapplicable because they are restricted to retail service.²³ PSL §67 will apply to the Storage Facility, which will require one or more meters to monitor energy transmitted to the bulk electric system.

It was decided in the Carr Street and Wallkill Orders that the remaining provisions of Article 4 would pertain to wholesale market participants.²⁴ Application of these provisions is deemed necessary to protect the public interest. The Article 4 provisions, however, are implemented in a fashion that limits their impact on the operation of competitive electric markets. Under PSL §66(6), wholesale market participants satisfy annual report filing requirements through a format designed to

(Carr Street Order); Case 91-E-0350, Wallkill Generating Company, Order Establishing Regulatory Regime (issued April 11, 1994) (Wallkill Order).

²³ See, e.g., PSL §§66(12) (optional tariff filings); §66(21) (retail electric corporation storm plans); §75 (excessive charges); and, §76 (rates charged to religious bodies).

²⁴ PSL §68 provides for certification of the construction of new plant or the retailing of electricity to customers via direct interconnections. PSL §69, §69-a, and §70 provide for the review of securities issuances, reorganizations, and transfers of securities or works or systems, respectively.

accommodate their particular circumstances.²⁵ Filings required under other provisions of Article 4 are reviewed with the scrutiny commensurate to the level the public interest requires. This analysis of Article 4 adheres to Ravenswood Development.

Regarding PSL §69, prompt regulatory action is possible through reliance on representations concerning proposed financing transactions. Additional scrutiny is not required to protect captive New York ratepayers, who cannot be harmed by the terms arrived at for these financings because lightly-regulated participants in competitive markets bear the financial risk associated with their financial arrangements.²⁶

Regarding PSL §70, it was presumed in the Carr Street and Wallkill Orders that "regulation does not adhere to transfer of ownership interests in entities upstream from the parents of the New York competitive electric generation subsidiary, unless there is a potential for harm to the interests of captive utility ratepayers sufficient to override the presumption."²⁷ In those Orders, however, wholesale market participants were also advised that the potential for the exercise of market power arising out of an upstream transfer would be sufficient to defeat the presumption and trigger PSL §70 review. Ravenswood Development may avail itself of this presumption. Under PSL §§66(9) and (10), we may require access to records sufficient to ascertain whether the presumption remains valid.

²⁵ Case 11-M-0295, Annual Reporting Requirements, Order Adopting Annual Reporting Requirements Under Lightened Ratemaking Regulation (issued January 23, 2013).

²⁶ See, e.g., Case 10-E-0405, NRG Energy, Inc., Order Approving Financing (issued November 18, 2010); Case 01-E-0816, Athens Generating Company, L.P., Order Authorizing Issuance of Debt (issued July 30, 2001).

²⁷ Carr Street Order, p. 8; Wallkill Order, p. 9.

Several provisions of PSL Article 6 adhere only to the rendition of retail service. These provisions do not pertain to Ravenswood Development because it will not engage in retail sales of electricity or other products.²⁸ Moreover, application of PSL §115, on requirements for the competitive bidding of utility purchases, is discretionary and will not be imposed on wholesale market participants. In contrast, PSL §119-b, which pertains to the protection of underground facilities from damage by excavators, adheres to all persons, including wholesale market participants.

The remaining provisions of Article 6 need not be imposed generally on wholesale market participants such as Ravenswood Development.²⁹ These provisions were intended to prevent financial manipulation or unwise financial decisions that could adversely impact rates charged by monopoly providers. In comparison, so long as the wholesale energy markets are effectively competitive, wholesale market participants complying with tariffs approved by FERC, such as Ravenswood Development, will provide just and reasonable rates and cannot raise prices even if their costs rise due to poor management. Moreover, imposing these requirements could interfere with wholesale market participants' plans for structuring the financing and ownership of their facilities. This could discourage entry into

²⁸ See, e.g., PSL §112 (rate order enforcement); §113 (reparations and refunds); §114 (temporary rates); §114-a (lobbying cost sin rates); §117 (consumer deposits); §118 (bill payments via an agency); §119-a (use of utility poles and conduits); and, §119-d (tax benefits in rates).

²⁹ These requirements include approval of: loans under §106; the use of utility revenues for non-utility purposes under §107; corporate merger and dissolution certificates under §108; contracts between affiliated interests under §110(3); and, water, gas, and electric purchase contracts under §110(4).

the wholesale market or introduce inefficiencies into market operations to the detriment of the public interest.

As discussed in the Carr Street Order, however, market power issues may be addressed under PSL §§110(1) and (2), which afford us jurisdiction over affiliated interests. These provisions of law will apply to Ravenswood Development based on its reported affiliations with LifeEnergy and CPower.

Finally, notwithstanding that it is lightly regulated, Ravenswood Development is reminded that it and any other entities that exercise control over Storage Facility operations remain subject to the PSL with respect to matters such as enforcement, investigation, safety, reliability, and system improvement, and the other requirements of PSL Articles 1 and 4, to the extent discussed above and in previous Orders.³⁰ Included among these requirements are the obligations to conduct tests for stray voltage on all publicly accessible electric facilities,³¹ to give notice of unit retirements,³² and to report personal injury accidents pursuant to 16 NYCRR Part 125. These conditions further ensure Ravenswood Development will render safe, adequate, and reliable service.

CONCLUSION

As discussed above, the Commission is granting a CPCN with conditions and authorizing lightened ratemaking regulatory

³⁰ See, e.g., Case 16-E-0409, Indeck Corinth Limited Partnership, Order Providing for Lightened Regulation (issued December 21, 2016).

³¹ Case 04-M-0519, Safety of Electric Transmission and Distribution Systems, Order Instituting Safety Standards (issued January 5, 2005), and Order on Petitions for Rehearing and Waiver (issued July 21, 2005).

³² Case 05-E-0889, Generation Unit Retirement Policies, Order Adopting Notice Requirements for Generation Unit Retirements (issued December 20, 2005).

treatment with respect to Ravenswood Development's Project. We have reviewed the extensive record in this proceeding and find that the construction, operation, and maintenance of the Storage Facility will not result in significant adverse environmental impacts.

The Commission orders:

1. A Certificate of Public Convenience and Necessity is granted to Ravenswood Development, LLC pursuant to Public Service Law section 68 to construct, operate, and maintain the energy storage facility as described in its petition (as supplemented) and in the body of this Order, subject to the conditions set forth below and as discussed in the body of this Order.

2. Ravenswood Development, LLC shall, within 30 days of the issuance of this Order, file with the Secretary a verified written statement signed by a duly authorized officer indicating Ravenswood Development, LLC's complete and unconditional acceptance of this Order and its terms and conditions. Failure to comply with this condition shall invalidate this Order.

3. Ravenswood Development, LLC and its affiliates shall comply with the Public Service Law in conformance with the requirements set forth in the body of this Order.

4. Before installation of energy storage batteries may commence, Ravenswood Development, LLC shall provide to the Secretary:

- a. Proof of receipt of third-party battery Type Certification, to the extent not already provided in the record of this proceeding;
- b. Manufacturer's assurance that battery and facility construction and operational plans

address all substantive conditions of such Type Certification; and

- c. Proof of liability insurance in an amount commensurate with industry standards.

5. Ravenswood Development, LLC shall, within 90 days of the issuance of this Order and every three years thereafter, file with the Secretary a decommissioning cost study in conformance with the requirements set forth in the body of this Order. The decommissioning cost estimate shall be updated by a qualified independent engineer licensed to practice engineering in the State of New York to reflect inflation and any other changes in cost. Ravenswood Development, LLC shall work with the Department of Public Service (DPS) Staff and New York City on an acceptable form of letter or letters of credit and Ravenswood Development, LLC shall file with the Secretary New York City's approval prior to construction. Ravenswood Development, LLC shall also file with the Secretary proof that the letter or letters of credit have been obtained in the decommissioning estimate amount. The letter or letters of credit should remain active for the life of the Storage Facility, until it is decommissioned, as adjusted every third year in consultation with New York City and DPS Staff. Ravenswood Development, LLC shall execute a decommissioning agreement with New York City establishing a right for New York City to draw on the letter of credit if Ravenswood Development, LLC defaults on any part of its decommissioning obligations.

6. Ravenswood Development, LLC shall obtain all necessary federal, state, and local permits and approvals, and shall implement appropriate mitigation measures defined in such permits or approvals.

7. Ravenswood Development, LLC shall file with the Secretary final site plans and construction drawings for the

project components, battery buildings sites, access roads, and electric lines associated with the Storage Facility for review before the start of construction.

8. Prior to commencing construction of the electric transmission interconnection, not including minor activities required for testing and development of final engineering and design information, Ravenswood Development, LLC shall provide to the Secretary final design plans and profile drawings of the substation and transmission interconnection and proof of acceptance of the design by Consolidated Edison Company of New York, Inc. (Con Edison). Such plans may be submitted by component design sequentially as per approvals by Con Edison.

9. The authorized electric plant shall be subject to inspection by authorized representatives of Department of Public Service Staff pursuant to §66(8) of the Public Service Law.

10. Ravenswood Development, LLC shall incorporate, and implement as appropriate, the standards and measures for engineering design, construction, inspection, maintenance and operation of its authorized electric plant, including features for facility security and public safety, utility system protection, plans for quality assurance and control measures for facility design and construction, utility notification and coordination plans for work in close proximity to other utility transmission and distribution facilities, vegetation and facility maintenance standards and practices, emergency response plans for construction and operational phases, and complaint resolution measures, as presented in its Petition, its Expanded Environmental Assessment, and this Order.

11. Ravenswood Development, LLC shall file with the Secretary, within three days after commencement of commercial operation of the electric plant, an original and three copies of written notice thereof.

12. Ravenswood Development, LLC, shall file a copy of each System Reliability Impact Study (SRIS) performed in accordance with the New York Independent System Operator, Inc.'s (NYISO) Open Access Transmission Tariff (OATT) approved by the Federal Energy Regulatory Commission, and all appendices thereto, reflecting the interconnection of the facility.

13. Ravenswood Development, LLC shall design, engineer, and construct facilities in support of each phase of the authorized electric plant in accordance with the applicable and published planning and design standards and best engineering practices of NYISO, the New York State Reliability Council (NYSRC) and successor organizations. Specific requirements shall be those required in the SRIS reports, as performed in accordance with the NYISO's OATT and by the Interconnection Agreement and the facilities agreement with the interconnecting utility.

14. Ravenswood Development, LLC, shall work with any Transmission Owner (as defined in the NYISO Agreement) to ensure that, with the addition of the electric plant (as defined in the Interconnection Agreement), the system will have power system relay protection and appropriate communication capabilities to ensure that operations of the transmission system is adequate and satisfactory to the NYISO, NYSRC, and Con Edison, and any successor Transmission Owner (as defined in the NYISO Agreement). Ravenswood Development, LLC shall ensure compliance with applicable criteria and shall be responsible for the costs to verify that the relay protection system is in compliance with applicable criteria.

15. Ravenswood Development, LLC shall file, not less than 90 days before the proposed energy storage facility commences commercial operations, a proposed methodology to account for the cost of constructing the new gas insulated

substation and related assets such that Ravenswood Development, LLC bears all costs to develop and construct this asset, Consolidated Edison Company of New York, Inc. ratepayers do not bear any responsibility for costs relating to this substation or related assets. The accounting treatment must provide for Con Edison to acquire the asset at a zero basis so as to avoid incurring a payment obligation.

16. Ravenswood Development, LLC shall operate the electric plant in accordance with the Interconnection Agreement, approved tariffs and applicable rules and protocols of Con Edison, NYISO, and successor organizations. Ravenswood Development, LLC may seek subsequent review of any specific operational orders at the NYISO, the Commission, the Federal Energy Regulatory Commission, or in any other appropriate forum.

17. Ravenswood Development, LLC, shall comply with the applicable reliability criteria of Con Edison, NYISO, and successor organizations. If it fails to meet the reliability criteria at any time, then Ravenswood Development, LLC shall notify the NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the Commission and interconnecting utility with a copy of the NYISO notice.

18. Ravenswood Development, LLC shall file as they become available a copy of the following documents with the Secretary:

- a. All facilities agreements with Con Edison, and successor Transmission Owner, throughout the life of the plant (as defined in the NYISO Agreement);
- b. Any documents produced as a result of the updating of requirements by the NYSRC;
- c. The Relay Coordination Study, which shall be filed not later than six months prior to the

- projected date for commencement of commercial operation of the facilities;
- d. A copy of the facilities design studies for the Electric Plant, including all updates (throughout the life of the plant);
 - e. A copy of the Interconnection Agreement and all updates or revisions (throughout the life of the plant); and,
 - f. If any equipment or control system with different characteristics is to be installed, Ravenswood Development, LLC shall provide that information before any such change is made (throughout the life of the plant).

19. Ravenswood Development, LLC shall obey unit commitment and dispatch instructions issued by NYISO, or its successor, in order to maintain the reliability of the transmission system. In the event that the NYISO System Operator encounters communication difficulties, Ravenswood Development, LLC shall obey dispatch instructions issued by the Con Edison Control Center, or its successor, in order to maintain the reliability of the transmission system.

- a. After commencement of construction of the authorized Electric Plant, Ravenswood Development, LLC shall provide Con Edison with a monthly report on the progress of construction and an update of the construction schedule, and file with the Secretary copies of current construction progress reports during all phases of construction. In the event the Commission determines that construction is not proceeding at a pace that is consistent with Good Utility Practice, and that a modification, revocation,

or suspension of the Certificate of Public Convenience and Necessity (Certificate) may therefore be warranted, the Commission may issue a show cause order requiring Ravenswood Development, LLC to explain why construction is behind schedule and to describe such measures as are being taken to get back on schedule. The Order to Show Cause will set forth the alleged facts that appear to warrant the intended action. Ravenswood Development, LLC shall have thirty days after the issuance of such Order to respond and other parties may also file comments within such period. Thereafter, if the Commission is still considering action with respect to the Certificate, a hearing will be held prior to issuance of any final order of the Commission to amend, revoke, or suspend the Certificate. It shall be a defense in any proceeding initiated pursuant to this condition if the delay of concern to the Commission:

- i. Arises in material part from actions or circumstances beyond the reasonable control of Ravenswood Development, LLC (including the actions of third parties);
- ii. Is not in material part caused by the fault of Ravenswood Development,
- iii. Is not inconsistent with a schedule that constitutes Good Utility Practice.

20. Ravenswood Development, LLC shall file with the Secretary, no more than four months after the commencement of construction, a detailed progress report. Should that report indicate that construction will not be completed before April

2021, Ravenswood Development, LLC shall include in the report an explanation of the circumstances contributing to the delay and a demonstration showing why construction should be permitted to proceed. In these circumstances, an order to show cause will not be issued by the Commission, but a hearing will be held before the Commission takes any action to amend, revoke, or suspend the CPCN.

21. For purposes of these conditions, Good Utility Practice shall mean any of the applicable acts, practices, or methods engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, and safety. Good Utility Practice is not intended to be limited to the optimum practice, method, or act, to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region in which Ravenswood Development, LLC is located. Good Utility Practice shall include, but not be limited to, NYSRC criteria, rules, guidelines, and standards, and NYISO criteria, rules, guidelines, and standards, where applicable, as they may be amended from time to time (including the rules, guidelines, and criteria of any successor organization to the foregoing entities). When applied to Ravenswood Development, LLC, the term Good Utility Practice shall also include standards applicable to an independent power producer connecting to the distribution or transmission facilities or system of a utility.

22. Except for periods during which the authorized facilities are unable to safely and reliably convey electrical energy to the New York transmission system (e.g., because of

problems with the authorized facilities themselves or upstream electrical equipment) Ravenswood Development, LLC's electric plant shall be exclusively connected to the New York transmission system over the facilities authorized herein.

23. Ravenswood Development, LLC shall work with the Con Edison system planning and system protection engineers to discuss the characteristics of the transmission system before purchasing any system protection and control equipment or equipment related to the electrical interconnection of the Project to the transmission system, and to ensure that the equipment purchased will be able to withstand most system abnormalities. The technical considerations of interconnecting the electric plant to the transmission facility shall be documented by Ravenswood Development, LLC and provided to the Secretary and Con Edison prior to the installation of transmission equipment. Updates to the technical information shall be furnished as available (throughout the life of the plant).

24. Ravenswood Development, LLC shall work with Con Edison engineers and safety personnel on testing and energizing equipment in the authorized substation, which shall be designed and constructed in a manner consistent with Con Edison's specifications. A testing protocol shall be developed and provided to Con Edison for review and acceptance. Ravenswood Development, LLC shall provide a copy of the testing design protocol to the Secretary within 30 days of the utility's acceptance. Ravenswood Development, LLC shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the Project to Con Edison's transmission system and provide the opportunity for DPS Staff to attend those meetings.

25. Ravenswood Development, LLC shall call the Bulk Electric Systems Section Chief within twelve hours to report incidents involving a fire or other catastrophic event involving a battery building and its associated equipment that affects the operation of the electric plant. Ravenswood Development, LLC shall submit a report on any such incident within seven days to DPS Staff and Con Edison. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. Ravenswood Development, LLC shall work cooperatively with Con Edison and NYISO to prevent any future occurrences.

26. Ravenswood Development, LLC shall make modifications to its Interconnection Facility, if it is found by the NYISO or Con Edison to cause reliability problems to the New York State Transmission System. If Con Edison or the NYISO bring concerns to the Commission, Ravenswood Development, LLC shall be obligated to address those concerns.

27. If, subsequent to construction of the authorized electric plant, no electric power is transferred out of such plant for a period of more than a year, the Commission may consider the amendment, revocation, or suspension of the Certificate.

28. In the event that a malfunction of the authorized electric plant causes a significant reduction in the capability of such plant to deliver power, Ravenswood Development, LLC shall promptly provide to the Secretary and Con Edison copies of all notices, filings, and other substantive written communications with the NYISO as to such reduction, and plans for making repairs to remedy the reduction, and the schedule for any such repairs. Ravenswood Development, LLC shall provide monthly reports to the Secretary and Con Edison on the progress

of any repairs. If such equipment failure is not completely repaired within nine months of its occurrence, Ravenswood Development, LLC shall provide a detailed report to the Secretary, within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months; if the repairs will not be completed within three months, Ravenswood Development, LLC shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to be pursued.

29. No less than 60 days prior to the commencement of operation, Ravenswood Development, LLC shall file with the Secretary Operation and Maintenance Plan(s) for the electric plant, including but not limited to a complete documentation of its emergency procedures and a list of emergency contacts. Any modifications to such Operation and Maintenance Plan(s) or emergency procedures or emergency contacts shall be documented and filed by Ravenswood Development, LLC with the Secretary within 14 days of such modifications.

30. Ravenswood Development, LLC shall provide all information, documents, reports, and other materials and communications that the Petition states will be provided to the Commission, Secretary, and/or DPS Staff.

31. Ravenswood Development, LLC and its affiliates shall comply with the Public Service Law in conformance with the circumstances contributing to requirements set forth in the body of this Order.

32. In the Secretary's sole discretion, the deadlines set forth in this Order may be extended. Any requests for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.

33. This proceeding is continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 19-E-0122 - Petition of Ravenswood Development, LLC for an Original Certificate of Public Convenience and Necessity and for an Order Providing for Lightened Regulation.

NOTICE OF DETERMINATION
OF SIGNIFICANCE

NOTICE is hereby given that an Environmental Impact Statement will not be prepared in connection with the approvals by the Public Service Commission in its Order Granting Certificate of Public Convenience and Necessity and Establishing Lightened Regulatory Regime.

This is based upon our determination, in accordance with Article 8 of the Environmental Conservation Law, that such action will not have a significant adverse effect on the environment. This action is an Unlisted Action as defined under 6 NYCRR Section 617.2(4)(ak). As such, we conducted an uncoordinated review considering the whole action with a primary focus on the discretionary decisions within our jurisdiction. To facilitate environmental review, Ravenswood Development, LLC submitted a Part 1 EAF and an Expanded Environmental Assessment. The Expanded Environmental Assessment includes a NYC Waterfront Revitalization Program Consistency and a noise report that was subsequently updated in August 2019. We used these materials to complete the Part 2 EAF. Our review found that none of the potential environmental impacts identified in the Part 2 EAF are applicable to issuing an Order Granting Certificate of Public Convenience and Necessity and Establishing Lightened Regulatory Regime. We did find that some topics of environmental review

captured in the Part 2 EAF are relevant to building and operating the proposed energy storage facility and determined that none of the relevant environmental concerns related to constructing or operating the facility will result in a potentially significant impact.

The proposed action is an approval of a petition requesting an Order Granting Certificate of Public Convenience and Necessity and Establishing Lightened Regulatory Regime. Granting the petition will permit Ravenswood Development LLC to develop a stand-alone, battery-based energy storage facility of up to approximately 316 megawatts (MW)(Storage Facility). The Storage Facility is located within the existing Ravenswood Generating Station, an industrial facility with multiple generating units dating back to the 1960's. The Storage Facility is consistent with the current industrial use of the existing facility and is not in conflict with surrounding land uses, zoning, or community character. A NYC Waterfront Revitalization Program Constancy Assessment form was provided and is subject to a Constancy Determination by New York City. Additionally, Staff performed a Coastal Assessment pursuant Part Title 19 NYCRR Section 600.4 and did not identify any potentially significant impacts.

Noise, contaminated material, and storm water control are potential impacts that were flagged during DPS Staff's environmental review. Ravenswood Development submitted an updated acoustical analysis and recommendations report in August 2019. The report illustrates that the Storage Facility will mitigate noise emanating from the Storage Facility's inverters to levels that conform with New York City Noise Control Code Limits. Areas within the Ravenswood Generating Station contain contaminated materials resulting from operations of a former

late nineteenth century manufactured gas plant and a petroleum spill that occurred prior to 2000. The site is currently under remediation. Construction of the Storage Facility will require relocation of monitoring wells. To address potential impacts to remediation, a revised remediation work plan for well relocation will be developed by Ravenswood Development and submitted to NYSDEC for review prior to construction. Potential impacts from storm water will be addressed through the State Pollutant and Discharge Elimination System Permit Program administered by NYSDEC. Specifically, Storage Facility construction and operation will require a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity and an Individual SPDES Permit Modification.

Based upon our review of the record, granting a Certificate of Public Convenience and Necessity pursuant to Public Service Law Section 68 and establishing a lightened ratemaking regulatory regime will not result in significant adverse environmental impacts.

The address of the Public Service Commission, the lead agency for the purposes of the Environmental Quality Review of this project, is Three Empire State Plaza, Albany, New York 12223-1350. Questions may be directed to Jeremy Rosenthal at (518) 474-3897 (Jeremy.rosenthal@dps.ny.gov) or to the address above.

KATHLEEN H. BURGESS
Secretary