

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on August 11, 2022

COMMISSIONERS PRESENT:

Rory M. Christian, Chair  
Diane X. Burman  
James S. Alesi  
Tracey A. Edwards  
John B. Howard  
David J. Valesky  
John B. Maggiore

CASE 22-T-0351 - Petition of New York Power Authority Relating  
to its Certificate of Environmental  
Compatibility and Public Need for the Y-49  
345kV Transmission Facility - Formerly Case  
70365.

ORDER APPROVING CHANGE TO THE ENVIRONMENTAL  
MANAGEMENT AND CONSTRUCTION PLAN

(Issued and Effective August 16, 2022)

BY THE COMMISSION:

INTRODUCTION

On May 18, 1988, the New York State Public Service Commission (Commission) issued Opinion 88-14 in Case 70365 (Certificate Order), granting the Power Authority of the State of New York (NYPA) a Certificate of Environmental Compatibility and Public Need (Certificate) pursuant to Public Service Law (PSL) Article VII. The Certificate authorized NYPA to construct the Y-49 Sound Cable Project (the Facility or Project), an approximately twenty-six-mile, 345 kilovolt (kV) submarine transmission cable connecting the Consolidated Edison Company of New York, Inc. 345 kV Sprain Brook Substation, located in Westchester County, to the Long Island Power Authority East

Garden City Substation, located in Nassau County. The Certificate Conditions contain several requirements for compliance, including a requirement that the Certificate Holder submit for public review and Commission approval an Environmental Management and Construction Plan (EM&CP) detailing the Facility's design, construction, and environmental controls. The Commission approved the Facility's EM&CP on February 8, 1989,<sup>1</sup> and NYPA placed the Project into service in 1990.

On June 7, 2022, NYPA notified Department of Public Service Staff (Staff) of a request to change the Facility's EM&CP to reconductor the Facility, install eight new underground utility vaults, and replace a portion of the Facility's fiber optic communication cable.

Through this Order, the Commission approves the change to the EM&CP as discussed below.

#### BACKGROUND

In granting NYPA's Certificate, the Commission approved Certificate Conditions relating to the construction, operation, and maintenance of the Facility. Certificate Condition 5 details the requirements and procedures NYPA must follow to propose changes to its EM&CP. Pursuant to Certificate Condition 5, NYPA submitted its proposed changes to its EM&CP on June 7, 2022. Therein, NYPA proposed to make the following changes to its EM&CP: (i) reconductor the Nassau County segment of the Facility with new 345 kV rated, 3,000 kcmil segmental copper conductor within the existing steel conduit; (ii) install eight new underground utility vaults on the Nassau County segment of the Facility; and (iii) replace existing fiber optic

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<sup>1</sup> Case 70365, Order Approving Environmental Management and Construction Plan, Subject to Conditions (issued February 24, 1989) (EM&CP Order).

communication cable in the Westchester and Nassau County segments of the Facility. No work will be completed in the submarine portion of the Facility.

PUBLIC NOTICE AND COMMENTS

Pursuant to Certificate Condition 5, NYPA notified all affected property owners and lessees, and all statutory and active parties on June 24 and June 28, 2022, respectively. Certificate Condition 5 permits written comments within ten days of the notification date. The comment period expired on July 8, 2022. One public comment was received, submitted on July 5, 2022. That comment noted that NYPA's proposed EM&CP changes did not include any studies on electromagnetic fields (EMF), and requested information on the EMF associated with the Facility. NYPA replied to this comment on July 15, 2022, explaining that the EMF for the Facility were studied as part of issuing the Certificate, and that the proposed changes to the EM&CP would not change the Facility's voltage, and therefore would not change the EMF.

LEGAL AUTHORITY

Certificate Condition 5 outlines the requirements to revise NYPA's approved EM&CP. The Condition states in relevant part that:

"The applicant shall report any proposed changes in an approved EM&CP to the Commission staff. Staff shall refer to the Secretary of the Commission reports of the proposed changes that do not cause substantial change in the environmental impact or are not related to issues contested during the proceeding. All other proposed changes in the EM&CP, including any proposals to construct the transmission line beyond the certified corridor limits, shall be referred by staff to the Commission for

approval. Upon referral to the Commission, the applicant shall notify all statutory and active parties and attempt to notify all affected property owners and applicant's lessees. The notice shall describe the requested change, state that documents supporting the request are available for inspection at specified locations, and state that persons may comment by writing to the Commission within ten days of the notification date."

This Condition allows the Secretary of the Commission to approve minor changes to the EM&CP, but requires NYPA to submit major changes to the Commission. A major change may include, for example, a change that would increase the environmental impacts of a facility.<sup>2</sup>

#### DISCUSSION

Staff concluded that NYPA's proposed changes would result in increased environmental impacts, and therefore the changes is a major change subject to the Commission's review and approval. NYPA's proposed changes entail installation of eight new underground utility vaults, including additional exploratory excavation that may be required to identify the exact location of existing conduit. Once new utility vaults are installed and existing conductor and dielectric fluid are removed, additional excavations along the route may be required for repair of

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<sup>2</sup> Under PSL §123(2), a hearing is required for a change to a Certificate if "the change in the facility . . . would result in any material increase in environmental impact of the facility or substantial change in the location of all or a portion of such facility . . . ." Although this requirement relates to a change to a certificate rather than an EM&CP, the standard may be used to determine whether Commission approval is warranted.

existing conduit. Additionally, the proposed changes may result in significant traffic impacts.

The Commission approves the changes because they are necessary to improve resiliency and reliability of the Facility. The Facility has experienced nine electrical faults within the last decade due to Thermal Mechanical Bending (TMB). Heat fluctuations along the cable cause TMB, which in turn causes mechanical stress to the Facility. Further, long conductor spans cause increased friction, exacerbating TMB. The changes will mitigate TMB occurrences along the Facility. New conductor at a higher rating and greater diameter will allow the Facility to operate at lower temperatures and reduce heat fluctuations. Eight new vaults will reduce the distance between vaults to mitigate fault probability, and also permit NYPA to install cable restraints that will reduce Facility movement and associated damage. Lastly, replacing the Facility's existing fiber optic communication cable reduces the risk of failed communications between protection systems, expediting response time and repair of potential faults or outages.

All construction would take place within an existing, paved right of way (ROW) or existing developed areas, which will mitigate many natural resource concerns. A limited portion of the Project will occur within the general vicinity of, but greater than a half mile from, recorded instances of Peregrine Falcon (*Falco peregrinus*). NYPA consulted with the New York State Department of Environmental Conservation Region 2 office about potential impacts to the species and determined that based upon the scope and location of the Facility, there would be no impact to the Peregrine Falcon. The northern end of the Project is also within the vicinity of Perfoliate-leaved Horse Gentian (*Triosteum perfoliatum*), a State-listed rare species. Due to the Project taking place in an existing paved ROW and highly

developed area, there is no expected impact to this species. No impacts to wetlands or streams are anticipated due to the Project location within an existing ROW, so a United States Army Corps of Engineers Nationwide Permit is not necessary. Finally, substantial vegetation clearing is not anticipated during construction, but should tree roots greater than three inches in diameter be encountered during excavation activities, NYPA will follow the Root Protection and Excavation Methods outlined in Section 1.1.4 of its EM&CP, minimizing impact to the greatest extent practicable.

Because construction would occur within the existing, paved ROW and in highly developed areas, no archaeological resource impacts are anticipated. In the unlikely event that any potential archeological or culturally sensitive resources are discovered along the Project route, NYPA will adhere to its Unanticipated Discoveries Plan attached as Exhibit 7 to its proposed change request.

NYPA would mitigate traffic impacts as well. To mitigate impacts to traffic, NYPA mentions in its report that most of the new and existing vaults fall within multi-lane roads, which can allow for selective road closure in order to maintain traffic while work is occurring. NYPA also submitted a Traffic Control and Safety Plan attached as Exhibit 5 to its report, and notes that not every existing vault will need to be accessed during the conductor pull.

Regarding the public comments submitted on July 5, 2022, the Facility's EMF will remain within the Commission's limits. Electric transmission line EMF strength is largely a function of a line's voltage. The Commission limits EMF at the

edge of electric transmission line ROWs to no more than 200 mG.<sup>3</sup> Evidence during the certificate proceeding indicated that the EMF directly over the Facility is 0.7 mG,<sup>4</sup> a strength that swiftly attenuates as distance from the center of the ROW increases. The proposed changes will not change the Facility's operating voltage, and therefore the Facility's EMF will not change. No new EMF study is necessary.

CONCLUSION

Based on the foregoing, the Commission approves the changes to the NYPA's EM&CP, consistent with the discussion above.

The Commission orders:

1. The proposed change to the Environmental Management and Construction Plan submitted by the New York Power Authority and approved by the Commission on February 8, 1989, is approved.
2. All other requirements of the approved EM&CP shall remain in effect.
3. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS  
Secretary

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<sup>3</sup> Cases 26529 and 26559 - Electric and Magnetic Field Standards for Transmission Lines - Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued September 11, 1990).

<sup>4</sup> Certificate Order, supra, p. 53.