## **BEFORE THE NEW YORK STATE PUBLIC SERVICE COMMISSION**

Petition of Consolidated Edison Company:of New York, Inc. for Approval of:Brooklyn Queens Demand Management:Program:

Case 14-E-0302

## PETITION FOR EXTENSION OF TIME TO IMPLEMENT BROOKLYN QUEENS DEMAND MANAGEMENT PROGRAM

## I. Introduction

On July 15, 2014, Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") filed a petition ("Petition") with the Public Service Commission ("Commission") seeking approval of its proposed Brooklyn Queens Demand Management ("BQDM") Program to defer the need for traditional infrastructure investments in the area served by the Brownsville No. 1 and No. 2 substations in Brooklyn.<sup>1</sup> The Petition was based upon a Con Edison forecast that by 2018 the sub-transmission feeders serving the Brownsville No. 1 and No. 2 substations feeders serving the Brownsville No. 1 and No. 2 substations are served by the Brownsville No. 1 and No. 2 substations are served by the Brownsville No. 1 and No. 2 substations are served by the Brownsville No. 1 and No. 2 substations feeders serving the Brownsville No. 1 and No. 2 substations would be overloaded for approximately 40 to 48 hours during the summer months unless the anticipated load growth in the BQDM area was reduced. The Commission authorized the BQDM Program in its December 12, 2014 *Order Establishing Brooklyn Queens Demand Management Program* ("Order"), granting authorization to the Company to incur up to

<sup>&</sup>lt;sup>1</sup> The Brownsville No. 1 and No. 2 substations support north central and eastern Brooklyn neighborhoods, including parts of Greenpoint, East Williamsburg, Bushwick, Bedford-Stuyvesant, Crown Heights, East Flatbush, Brownsville, and East New York, and southwestern Queens neighborhoods, including parts of Richmond Hill, Howard Beach, Broad Channel, Ozone Park, South Ozone Park, Woodhaven, and Kew Gardens.

\$200 million in expenditures to implement a portfolio of customer-side and non-traditional utility-side solutions to defer major infrastructure upgrades.<sup>2</sup>

As set forth below, the Company has been successfully implementing the BQDM Program and projects that it will achieve, as scheduled and under budget, more demand reductions than originally assumed necessary to defer the traditional infrastructure targeted in the Petition and Order. Based upon its success to date, revised peak load forecasts, and traditional infrastructure improvements envisioned in the Order, the Company now has the opportunity to defer additional traditional investments. The Company requests here that the Commission grant an extension of time to implement the BQDM Program so that the Company can obtain additional demand reductions and defer additional traditional infrastructure investments, without any additional funding.

## II. Background

To address the potential overload of the sub-transmission feeders serving the Brownsville No. 1 and No. 2 substations, Con Edison's traditional approach would have been to construct a new area substation, establish a new switching station on the existing property of the Gowanus station, and construct sub-transmission feeders between the new Gowanus switching station and the new area substation by 2017.

In the Petition, the Company proposed to instead implement the BQDM Program, which consists of approximately 52 MW of non-traditional utility-side (11 MW) and customer-side solutions (41 MW). In its Order, the Commission approved the BQDM Program and granted authorization to the Company to incur up to \$200 million in expenditures to implement a portfolio of customer-side and non-traditional utility-side solutions to defer major infrastructure

<sup>&</sup>lt;sup>2</sup> Case 14-E-0302, *Petition of Consolidated Edison Company of New York, Inc. for Approval of Brooklyn Queens Demand Management Program*, Order Establishing Brooklyn/Queens Demand Management Program (issued December 12, 2014).

upgrades. The Commission characterized the BQDM Program as a new "regulatory paradigm where utilities incorporate alternatives to traditional infrastructure investment when considering how to meet their planning and reliability needs"<sup>3</sup> and noted that the BODM Program "provides an opportunity and challenge for Con Edison to demonstrate how a market and new technologies can provide solutions for a reliability need that heretofore was met simply by deployment of additional capital on the T&D system."<sup>4</sup> Importantly, the Commission recognized the need to provide the Company the flexibility to respond to real market responses and to develop a market that will "enhance consumer value, reduce risk, and ensure safe and reliable service."<sup>5</sup> The Commission authorized recovery of BQDM Program expenditures, including a regulated return, over a 10-year amortization period, and also approved a return on equity ("ROE") adder of up to 100 basis points contingent on the Company's meeting performance goals related to the total quantity of customer-side solutions, diversity of vendors providing such customer-side solutions, and cost-effectiveness of the BQDM Program portfolio of solutions relative to the traditional portfolio of solutions being deferred. Significantly, the performance goals were designed to encourage the Company to achieve more than the 41 MW of customer-side solutions the Company had proposed as necessary to obtain the desired infrastructure deferral.

#### III. The BQDM Program Is Achieving the Demand Reductions Anticipated in the Order and System Conditions Benefit Further from Traditional Infrastructure Improvements and Other Forecasted Reductions in Peak Demand

As required by the Order, the Company reports the BODM Program's progress on a quarterly basis to the Commission. To date, the Company has reached over 3,700 small businesses, 1,000 multi-family buildings, and 2,200 residences in the community, delivering them permanent load reductions and, consequently, lowering their electricity bills for the long

<sup>&</sup>lt;sup>3</sup> *Id.*, p. 2. <sup>4</sup> *Id.*, p. 15.

<sup>&</sup>lt;sup>5</sup> *Id*.

term. The Company has also obtained contractual demand reduction commitments from a variety of other customer-side solutions, such as fuel cells, combined heat and power installations, battery storage, thermal storage, and solar photovoltaic facilities that are in varying stages of implementation. In addition, the Company has obtained contractual demand reduction commitments from a multi-technology installation at an affordable housing facility that will demonstrate the use of multiple distributed energy resources ("DER") at a location that (1) lowers customer energy expenses, (2) enhances resiliency by providing backup power to the building that houses a community facility room, refrigerators, and a phone charging area, (3)provides grid benefits through lowering demand in the area targeted by the BQDM program, and (4) provides useful learning on how different DER technologies, intermittent, base load and dispatchable, can be integrated. In July 2016, the Company implemented an innovative descending clock auction, a competitive and highly transparent mechanism, in order to procure reliable and dispatchable demand response ("DR") resources, after conducting an extensive outreach and training campaign. The auction proved very successful in developing a highly animated DR market that has resulted in six new entrants to the DR market in the Company's territory as well as in spurring secondary market activity. On the utility-side, the Company installed advanced distribution automation technology in order to develop a conservation voltage optimization ("CVO") program with promising results. The Company is also implementing a lithium-ion battery on Company property that is expected to provide the Company valuable experience with operations, control, performance, and communications related to energy storage technologies.

Based on contracts with DER providers the Company currently projects that it will achieve 42 MW of customer-side solutions and 11 MW of utility-side solutions by June 1, 2018.<sup>6</sup> In addition, system conditions related to the subtransmission feeders' capability have continued to evolve since the Order was issued in 2014. In particular, the Company's peak demand forecasts for the BQDM networks' load area have declined from three years ago, in a directionally consistent manner and consistent with broader regional trends, in excess of the reductions resulting from the BQDM Program, driven by lower economic forecasts and slower than initially anticipated new construction by customers. Further, installation of capacitor banks on radially supplied overhead circuits has improved the load power factor resulting in a modest boost to the subtransmission capability. Even with new customer projects and economic activity moving forward as the recent rezoning in the area leads to more developments and load over the long term, the lower peak demand forecast and foregoing capacitor bank installation have nonetheless provided the Company and customers in the BQDM Program area with additional reliability benefits by providing (1) a "reliability cushion" to mitigate potential risks in execution of the BQDM Program portfolio of solutions, and (2) an opportunity to defer additional infrastructure investments.<sup>7</sup>

## IV. <u>The Company Proposes an Extension of the BQDM Program, with No</u> <u>Termination Date and with Funds Maintained at Current Authorization Levels.</u>

Given the successes achieved to date by the BQDM Program, the level of contracted customer-side solutions anticipated to become operational in the next two years, the projects

<sup>&</sup>lt;sup>6</sup> While the Company anticipates more than 41 MW of load relief will be achieved by summer of 2018, the Company does not expect the entirety of the load relief to continue into 2019 and beyond, consistent with the assumptions in the Company's benefit-cost analyses. This would occur for temporally compensated resources such as DR, which cannot be expected to provided load relief beyond 2018 without compensation, and for other DER that degrade or otherwise under-performanter their contractual commitment period.

<sup>&</sup>lt;sup>7</sup> Commission approval of the extension requested in this petition, combined with the "reliability cushion," would provide the Company with the flexibility to obtain load relief as necessary to meet system needs and benefit customers, as opposed to according to a specific schedule such as anticipated in the Order.

being implemented on the utility-side, and the changes in external conditions, the Company is reasonably confident it will achieve deferral of the traditional infrastructure build as originally intended while continuing to provide safe and reliable service.

In order to maximize benefits to customers of BQDM Program success to date as well as reduced load forecasts, and consistent with the flexibility referred to in the Order, the Company proposes to continue the BQDM Program beyond the originally intended timeframe, *i.e.*, beyond 2018, with no termination date, and without any additional increase in the original funding authorization of \$200 million.<sup>8</sup>

The Company is looking to extend the program, notwithstanding the fact that it has contractual commitments from DER providers to meet the originally determined BQDM Program load relief goals, so it can seek additional DERs that will result in additional customer and deferral benefits.

The Company believes the extension will allow the Company to achieve BQDM Program goals and procure customer-side and non-traditional utility-side solutions in excess of the originally planned quantity, resulting in additional benefits to customers. The extension of timeline will provide the following benefits: (1) opportunity to potentially defer the traditional infrastructure need date beyond the original deferral period by an additional period of up to two years; (2) opportunity to continue and enhance market development efforts in the area targeted by the BQDM Program in line with the objectives of the Reforming the Energy Vision ("REV") proceeding;<sup>9</sup> and (3) provide an ability to better manage risks including risks of an increase in area forecasts in the future, as well as execution and performance risks including any delays in the implementation of DER. Significantly, the Company anticipates that pursuing load relief

<sup>&</sup>lt;sup>8</sup> The Company is not seeking any changes to the potential 100 basis point ROE incentive; the Company intends to file for the incentive in compliance with the Commission timing in the Order.

<sup>&</sup>lt;sup>9</sup> Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision.

opportunities beyond 2018 would result in an additional important benefit; the Company is seeking to be able to also defer the Glendale Project, which has been a part of the traditional solutions portion of the overall BQDM Program and which the Company would otherwise implement to be in service in 2019. Specifically, the Glendale Project refers to the planned 60 MW load transfer out of the areas targeted by the BQDM Program, along with related feeder and transformer upgrades, which the Company now anticipates deferring by two years to 2021. Moreover, deferring the Glendale Project for two additional years would allow the Company to explore innovative opportunities that might defer or entirely offset the need for Glendale Project.

The BQDM Program demonstrates the benefits of non-wires alternatives ("NWA"). Implementing a phased three-year BQDM Program has provided the Company with optionality to leverage DER and address system needs as they arise. Extending the BQDM Program allows, appropriately, the continued development of DER while enabling further deferral opportunities. It also furthers additional policy objectives such as REV policy goals of animating DER markets and delivering benefits to customers.

# V. <u>Conclusion</u>

For the reasons set forth above, the Company respectfully requests that the Commission authorize an extension of the BQDM Program with no termination date and with no change to authorized spending or to the incentive mechanism.

New York, New York January 19, 2017

Respectfully submitted,

# CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

By its Attorney

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