

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

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**Petition of Consolidated Edison Company of :
New York, Inc. for Approval of : Case 14-E-0302
Brooklyn Queens Demand Management :
Program :**
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**RESPONSE TO COMMENTS ON PETITION FOR EXTENSION OF TIME TO
IMPLEMENT BROOKLYN QUEENS DEMAND MANAGEMENT PROGRAM**

I. Introduction

On January 19, 2017, Consolidated Edison Company of New York, Inc. (“Con Edison” or the “Company”) filed a petition (“Petition”) with the Public Service Commission (“Commission”) seeking an extension of time to implement the Brooklyn Queens Demand Management (“BQDM”) Program so the Company can obtain additional demand reductions and defer additional traditional infrastructure investments, without any additional funding.¹ The Commission originally authorized the BQDM Program in its *Order Establishing Brooklyn Queens Demand Management Program* (“Order”), granting authorization to the Company to spend up to \$200 million to implement a portfolio of customer-side and non-traditional utility-side solutions to enable deferral of major infrastructure upgrades.²

¹ Case 14-E-0302, *Petition of Consolidated Edison Company of New York, Inc. for Approval of Brooklyn Queens Demand Management Program*, Petition for Extension of Time to Implement Brooklyn Queens Demand Management (filed January 19, 2017).

² Case 14-E-0302, *Petition of Consolidated Edison Company of New York, Inc. for Approval of Brooklyn Queens Demand Management Program* (“BQDM Proceeding”), BQDM Proceeding, Order Establishing Brooklyn/Queens Demand Management Program (“Order”) (issued December 12, 2014).

On April 3, 2017, the New York Battery and Energy Storage Technology Consortium (“NY BEST”) and the City of New York (“City”) submitted comments³ generally supportive of the petition and the Company’s efforts to find opportunities such as the BQDM Program to defer traditional infrastructure investments using cost-effective non-traditional alternatives. The City also requested information on additional deferral facilitated by the extension as well as risks and costs, and voiced general concerns about performance incentives awarded to the Company. The Company thanks NY BEST and the City for their supportive comments and provides further information in this response to address the City’s questions.

On April 4, 2017, Peak Power LLC (“PP”) submitted comments addressing the BQDM Program’s transparency, cost-effectiveness, customer-side solution (“CSS”) procurement and performance, and generally the Commission’s overall approach to the development of Non-Wires Alternatives.⁴ The Company believes the conclusions reached by PP are flawed and inaccurate, and based on a poor understanding of the BQDM Program. The Company reiterates the BQDM Program’s success in providing benefits to customers, including enabling achievement of infrastructure deferral, animating the distributed energy resource (“DER”) marketplace, and generally furthering the goals of the Commission’s Reforming the Energy Vision (“REV”) proceeding.⁵

The Company first notes the significant pioneering and innovative value the BQDM Program is providing. The program benefits certain customers in the BQDM community through enhanced resiliency through islanding, as discussed further below, and increased penetration of DER, particularly energy efficiency, as well as all Company customers through

³ BQDM Proceeding, Comments of New York Battery and Energy Storage Consortium and Comments of New York City (both filed April 3, 2017) (“City Comments”).

⁴ BQDM Proceeding, Comments of Peak Power LLC (“PP Comments”) (filed April 4, 2017).

⁵ Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision (“REV Proceeding”).

lower costs than traditional utility investment alternatives. Stakeholders and policymakers also benefit because the program serves as a leading example of REV-related policies, by fostering new markets and driving increased penetration of DERs through greater customer engagement in a manner that it is beneficial to customers and the management of the grid itself. The program also:

- serves to develop market-based procurement approaches that facilitate resource acquisition at competitive prices;
- advances the integration of DER to improve grid management, allowing better understanding of the risks associated with the development of DER and providing key reliability information as DER become operational; and
- provides information about developing portfolios of DER with distinct operational and reliability characteristics to collectively and reliably enable deferral of traditional infrastructure.

The Company respectfully submits these comments to clarify the record for the Commission's consideration.

II. BQDM Program and Solutions Portfolio Is Robust and Transparent

Contrary to PP's assertions of a "limited record,"⁶ the BQDM Program has been robust, detailed, and transparent since the Company submitted its petition ("2014 Petition") to establish the program on July 15, 2014. These qualities are a significant driver behind the BQDM Program's widespread support among various stakeholders and in the local community.

PP's description of the "limited record" of the BQDM Program is apparently based on a claim of an "ambiguous distinction" between customer-side solutions and non-traditional utility-

⁶ BQDM Proceeding, PP Comments, p. 2.

side solutions, and traditional utility-side solutions.⁷ From the program’s inception, however, the Company, in the 2014 Petition, stated that the non-traditional customer-side and utility-side demand reduction solutions would be used “in conjunction with” traditional utility investments in order to defer more expensive traditional utility investments.⁸ Accordingly, in its approval, the Commission highlighted the Company’s plan, noting:

In conjunction with the BQDM Program, the Company plans to also undertake approximately 17 MW of traditional utility infrastructure investment, consisting of capacitor bank installations that will provide 6 MW of capability and 11 MW of load transfers from the affected area to other networks. [...] Furthermore, the Company indicates that the combination of these alternate solutions in concert with a proposed 80 MW load transfer to the Glendale substation, addition of a fourth transformer at the Newtown substation, and the installation of a fifth transformer at the Glendale substation, could potentially defer the need for a new substation and Gowanus expansion to 2026 or beyond.⁹

According to its current plans, the Company now forecasts the need for a 60 MW load transfer to the Maspeth network, the need for which will further be deferred by approximately two years if the Commission grants the Company the extension requested through the Petition.¹⁰

In addition, the BQDM Program has publicly offered opportunities for DER providers to participate in the Program through an initial RFI issued in July 2014 and a subsequent Demand Response (“DR”) auction in July 2016. Moreover, the Company publicly files quarterly reports detailing the portfolio of customer-side solutions and non-traditional utility-side solutions that have been developed, that are being implemented, and that are being considered.¹¹ In the reports, the Company provides both the expenses incurred during the quarter and cumulatively, as well as demand reductions provided by customer-side solutions achieved on an hourly basis to

⁷ *Id.*, p. 3.

⁸ BQDM Proceeding, 2014 Petition, p. 2.

⁹ BQDM Proceeding Order, p. 3.

¹⁰ Case 16-M-0411, *In the Matter of Distributed System Implementation Plans*, Con Edison Distributed System Implementation Plan (filed June 30, 2016).

¹¹ *E.g.*, BQDM Proceeding, BQDM Quarterly Expenditures & Program Report Q4-2016 (filed February 28, 2017).

provide key insights into real load relief. Further, the reports provide information about BQDM Program solutions that the Company pursued for inclusion in the resources portfolio, but were subsequently determined to be no longer viable, thus providing information about the evolution of the portfolio. The reports also provide information about benefits that the BQDM Program is providing to the local community and the outreach that the Company conducts in the neighborhoods covered by the BQDM Program.

In addition, on a semi-annual basis, the Company develops a benefit-cost analysis, which is also filed publicly. The analysis, discussed further in Section III, compares the BQDM Program portfolio, including customer-side, non-traditional utility-side, and traditional utility-side solutions, to traditional infrastructure, including a substation, that would otherwise be built. Results from the most recent benefit-cost analysis indicate that the BQDM Program continues to provide net benefits to customers over the long run, in addition to the benefits the BQDM Program is providing to the local community and the lessons that it is providing to advance goals of the REV initiative by enabling the implementation of non-wires alternatives, deep customer engagement, DER implementation and performance evaluation, and innovative market-procurement methodologies.

III. BQDM Program Is Cost-Effective and Provides Benefits including Flexibility

The Company filed its most recent benefit-cost analysis on February 28, 2017. That analysis provided information regarding the portfolio of projects associated with the BQDM Program that enabled deferral, and the portfolio of projects that would have been implemented absent the BQDM Program.¹² The analysis illustrates that the BQDM Program portfolio continues to be cost-effective (with a benefit to cost ratio of 1.05), reflecting an appropriate

¹² BQDM proceeding, Semi-Annual Benefit Cost Update (filed February 28, 2017).

consideration of both costs and benefits,¹³ resulting in a net benefit (of approximately \$24.5 million) to customers over the longer term, contrary to PP's questioning of the economics.¹⁴ If the Commission approves the extension requested in the Petition to enable additional infrastructure deferral and if the date when a new substation is needed extends beyond 2026 (as discussed in Section IV), now possible as a result of the BQDM Program approach, the BQDM Program's cost-effectiveness would become additionally enhanced. Further, in addition to the benefit-cost analysis, positive contributions of the BQDM Program include: (1) enabling customers to better manage their energy use, (2) permanent lowering of electric bills, (3) the early lessons that the BQDM Program is providing to advance goals of the State's REV initiative by enabling the deployment of DERs that improve overall system utilization through the implementation of non-wires alternatives, (4) the flexibility provided by the BQDM Program to respond to changed circumstances, including by seeking to defer additional traditional infrastructure, and (5) enhanced resiliency through both islanding capabilities during emergencies at certain location(s) and through increased penetration of DER that could be modified to provide increased resiliency.

The most recent BQDM quarterly report shows that the BQDM Program has already installed energy efficiency measures in over 3,700 small businesses, 1,000 multi-family buildings, and 2,200 residential dwellings in the community providing local economic benefits through permanent reductions in electric bills¹⁵ as well as benefits resulting from adoption of more efficient, and typically longer life, measures. Similarly, the Company is working with the

¹³ The Commission has since approved a benefit cost framework for use by utilities in New York that is primarily based on a societal cost test, *i.e.*, using the societal perspective, in order to determine cost-effectiveness. REV Proceeding, Order Establishing the Benefit Cost Analysis Framework (issued January 21, 2016), pp. 12.

¹⁴ BQDM Proceeding, PP Comments, p. 7. Interestingly, PP noted that its comments were not intended to diminish the BQDM effort that PP described as "Herculean." *Id.*, p. 3.

¹⁵ BQDM Proceeding, BQDM Quarterly Expenditures & Program Report Q4-2016 (filed February 28, 2017).

New York City Housing Authority to help the Authority install efficient lighting and air-conditioners for its residents. The BQDM Program has improved resiliency at an affordable housing complex, encouraging the deployment of solar, fuel cell, and battery technologies. As noted in the Petition, in July 2016, the Company implemented an innovative descending clock auction, a competitive and highly transparent mechanism, in order to procure technology-agnostic reliable and dispatchable demand response (“DR”) resources, after conducting an extensive public outreach and training campaign. The auction proved successful in facilitating a highly animated DR market, and in helping test a competitive market procurement mechanism, resulting in six new entrants to the DR market in the Company’s service territory as well as spurring secondary market activity. As opposed to PP’s characterization of non-traditional solutions in the BQDM program,¹⁶ by 2018, the Company expects a portfolio of customer-side DER resources including DR, energy efficiency, fuel cells, combined heat and power, solar, battery storage, and thermal storage to provide additional insights into implementation, integration, and performance of various DERs, insights that will provide valuable operating experience as New York customers adopt more technologies.

The Company noted in the Petition that the peak demand forecasts have declined in excess of reductions achieved through the BQDM Program, driven by lower economic forecasts and slower than initially anticipated new construction by customers.¹⁷ If the Company had pursued the traditional option, the Company would have already incurred significant expenditures related to the construction of the substation and related infrastructure upgrades. In contrast, primarily as a result of the BQDM Program, the Company was able to request an

¹⁶ BQDM Proceeding, PP Comments, pp. 10-11.

¹⁷ BQDM Proceeding, Petition, p. 5.

extension of the program that will allow the Company to further defer the Glendale Project¹⁸ by two years from 2019 to 2021, resulting in additional benefits to customers. Further, primarily because of the BQDM Program, customers can gain additional deferral benefits by additional substation deferral.¹⁹

IV. BQDM Program Extension Will Enable Additional Deferral

The City requests information about the amount of load relief needed to achieve additional deferral and the Company's ability to achieve such deferral as requested in the Petition.²⁰ The extension of the BQDM Program requested in the Petition will allow the Company to defer the Glendale Project by approximately two years from 2019 to 2021. Further, the Company anticipates achieving the 10-19 MW of non-traditional solutions necessary for deferral of the Glendale Project to 2021 without the need for any additional funds beyond the BQDM Program authorization.

The City requested additional information about changes to peak demand forecasts in the BQDM Program area.²¹ The Company's peak demand forecast for the BQDM networks' load areas has declined since the inception of the BQDM program in 2014. This decline in the forecast in excess of load reductions achieved through the BQDM Program is directionally consistent with broader regional trends. The independent electric network peak demand forecast has declined for three main reasons: (1) the completion of load transfers, (2) achieved BQDM Program reductions, and (3) reduced new business resulting from changes to econometric factors, project cancellations/deferrals, and additional improvements to forecast methodologies

¹⁸ The Glendale Project is a part of the traditional solutions portion of the overall BQDM Program and includes: 60 MW load transfer from BQDM networks to the Maspeth network, addition of a 138 kV feeder from Vernon to Glendale substations, and the addition of a transformer at the Glendale area substation.

¹⁹ The Company's current plans indicate that the substation deferred through the BQDM program is no longer needed in the 10-year planning horizon through 2027, and potentially beyond 2030.

²⁰ BQDM Proceeding, City Comments, p. 2.

²¹ *See id.*

to predict residential load demand and customer load ramping estimates. When adjusted for load transfers and achieved BQDM reductions, the forecasted loads for 2019 to 2021 were reduced by approximately 13 MW between the forecasts issued in 2013 and 2016 in the BQDM load area.

Furthermore, the installation of capacitor banks on radially supplied overhead circuits from Brownsville No.2 substation has improved the load power factor, resulting in a boost to the subtransmission feeder capability of approximately 12 MW.

Based upon the combination of the reduced peak demand forecast, the installation of the capacitor banks, and load relief achieved by the BQDM Program (through increased CSS) together with Conservation Voltage Optimization (“CVO”) on the utility side) the Company estimates that it will require approximately 10 MW to 19 MW to defer the Glendale Project to 2021, based on the current demand forecast.

V. BQDM Forecasts Use Industry-Standard Methodologies

The BQDM network peak demand forecast is developed through industry standard electric forecasting analytic methodologies. Regression analysis is utilized to determine the weather adjusted peak demand for each summer. Bottom up and top down approaches are used to predict short-term and long-term new business growth for residential, commercial, and governmental customers. Load modifiers such as photovoltaic installations, DG, battery storage, programmatic energy efficiency, DR, electric vehicles, and conversion of steam driven air conditioning to electric are all considered along with a more macro-econometric analysis that examines gross metro product, private non-farm manufacturing employment, and disposable income. Additional forecasting information can be found in the Company’s 2016 Distribution System Implementation Plan.²²

²² Case 16-M-0411, *In the Matter of Distributed System Implementation Plans*, Con Edison Distributed System Implementation Plan (filed June 30, 2016).

VI. The Company Is Requesting No Additional BQDM Program Incentives Related to the Extension

The City raised general concerns about the possibility of the Company receiving incentives through the BQDM Program and through other earning adjustment mechanisms (“EAMs”) approved in the Company’s rate case. The Company is not requesting additional BQDM Program-specific incentives through the extension period beyond what the Company will achieve from the BQDM Program period through 2018.

Further, the Company notes that the extension it is seeking is primarily to enable the Company to defer the Glendale Project, a project that has already been identified as a potential candidate for deferral in the Company’s Distributed System Implementation Plan,²³ well before the Company’s EAMs were approved by the Commission. The extension would enable the Company to pursue deferral of the Glendale Project without any funding authorization beyond what the Commission approved for the BQDM program.

²³ *Id.*, p.10.

VII. Conclusion

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
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Respectfully submitted,

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.

By its Attorney



Daniel W. Rosenblum
Consolidated Edison Company
of New York, Inc.
4 Irving Place, 18th floor
New York, NY 10003
(p) 212-460-4461
(f) 212-677-5850
e-mail: rosenblumd@coned.com