STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 09-E-0115 – Proceeding on Motion of Commission to Consider
Demand Response Initiatives

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
TARGETED DEMAND SIDE MANAGEMENT PROGRAM
ANNUAL REPORT
No. 4

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1. INTRODUCTION

Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") submits this annual report ("2015 Report") for its Targeted Demand Side Management ("TDSM") Program ("Targeted Program" or "the Program") pursuant to the New York Public Service Commission’s ("Commission" or "PSC") June 1, 2011 Order Adopting with Modifications a New Targeted Demand Side Management Program for Consolidated Edison Company of New York, Inc. (the "June Order") requiring the Company to submit an annual report on the Program to the Commission.¹

The June Order requires that:

This report shall include details on all T&D projects that were targeted for deferral, the RFPs issued and the contracts awarded, as well as the results from its efforts on the secondary system and an accounting of all other costs incurred. The annual report shall also provide the TRC test results by project for all contracts that were entered into or other programs funded during that period. Furthermore, the report shall detail the Company’s accounting for deferring for the benefit of ratepayers of any cost recovery embedded in base rates related to the T&D projects that were deferred as a result of the Targeted DSM Program, to insure

¹ Case 09-E-0115 - Proceeding on Motion of the Commission to Consider Demand Response Initiatives, Order Adopting with Modifications a New Targeted Demand Side Management Program for Consolidated Edison Company of New York, Inc., issued and effective June 1, 2011. The Annual Report date in the June Order was changed from September 1 to December 1 in a ruling by the Commission’s Secretary. Ruling on Extension Request, issued July 18, 2012.
that ratepayers are not paying for both the targeted DSM measure and the carrying charges on projects that were deferred.\(^2\)

The June Order authorized the Company to achieve 100 MW of load relief by committing funding of up to $25 million per year on (i) DSM projects in targeted networks to achieve permanent demand reductions subject to meeting certain criteria such as passing a specified cost-effectiveness test, and (ii) additional marketing and added incentives to Energy Efficiency Portfolio Standard (“EEPS”), the New York State Energy Research and Development Authority (“NYSERDA”) and New York Power Authority (“NYPA”) demand-side management programs, including coordination with other efficiency providers and program sponsors; inclusive of costs incurred to develop and manage the program.\(^3\) The June Order approved the collection of any such incurred costs on a monthly basis through the Monthly Adjustment Clause (“MAC”) mechanism and stated that actual recovery may occur beyond the annual period when the commitment was first entered into.

This 2015 Report covers the period January 1, 2015 through May 31, 2015.\(^4\) This is the last TDSM report the Company will file, since the TDSM Program’s four-year authorization ended on May 31, 2015.\(^5\) TDSM projects during 2015, as described in greater detail below, included activities related to virtual energy audits and completion of the development of an Integrated Demand Side Management (“IDSM”) model. All targeted load relief activities undertaken by the Company in 2015 have been pursued through the Brooklyn Queens Demand Management (“BQDM”) Program and have been reported in BQDM Program quarterly reports.\(^6\)

2. **T&D PROJECTS TARGETED FOR DEFERRAL**

2.1. **Program Planning**

The Company’s Targeted Program for each year is based upon a careful analysis of forecasted peak demands and potential DSM projects. The Company issues a new peak demand

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\(^2\) June Order, p. 11.

\(^3\) June Order, p. 5-6.

\(^4\) The Company is providing actual data through October 31, 2014 and estimated data for November and December, 2014.

\(^5\) The Company has a pending petition under Case 15-E-0229 for the approval of a new Targeted Demand Management (“TDM”) program that requests up to $60 million in authorized spending over two years to pursue new opportunities for customer-side solutions.

\(^6\) 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 and effective December 12, 2014.
forecast at the end of the third quarter of each year. This forecast is then used to update the Company’s short- and long-term capital plans, including the preliminary Area Substation and Sub-transmission Feeder Ten-Year Load Relief Program (“Load Relief Program”), which is generally completed in the fourth quarter. Based upon the Load Relief Program, a preliminary “Projects to be Considered for Potential Deferral by Additional DSM” list is developed and distributed to Program staff and other internal stakeholders in the fourth quarter each year. This potential Targeted DSM project list is then reviewed for likely viable DSM projects – from both timing and MW needed perspectives.

In the first quarter each year, project cost estimates are developed for the identified load relief projects. In the second quarter, the final Load Relief Program and potential DSM projects list are issued and circulated. From the final list and engineering cost estimates, the Company evaluates the potential and cost effectiveness of DSM as load relief. Projects which are appropriate from a timing and cost-benefit perspective move forward as TDSM projects.

On November 14, 2014, the Preliminary 2015-2024 Load Relief Program (“LRP”) was published by Area Station Planning. This was followed by a final report (“Final Report”) that was issued on June 1, 2015. Even if the Final Report had provided the basis for additional TDSM projects, they would have occurred after the end of the TDSM Program.7

2.2. Projects Targeted

In late 2013, the Company identified the major near-term project as the constraint on the sub-transmission feeders serving the Brownsville 1 and 2 sub-stations. The Company identified the need to promptly build and deploy a new substation in support of growth in the demand for electricity in the area served by the Brownsville 1 and 2 sub-stations. This area covers the three electrically independent networks of Ridgewood, Richmond Hill and Crown Heights of the BQDM area. The Company is deferring the need for the new sub-station through the BQDM Program.

7 The Final Report includes potential for DSM opportunities in two different areas, i.e., the area targeted under the BQDM program and the area served by the Bensonhurst 2 substation (in 2021), identified for area substation load relief. On October 22, 2015, however, the Company issued the Preliminary 2016-2025 LRP which indicates slower peak load growth in the networks served by Bensonhurst. As a result of the lower forecast, the previously projected capability shortfalls in Bensonhurst have been deferred to beyond the LRP horizon.
2.3. **Mechanisms for Load Reductions**

The TDSM Program completed initiatives in 2015 that improve the Company’s ability to assess potential for Distributed Energy Resources (“DERs”) and facilitate the dissemination of information and education to customers. As in previous years, and as identified in the BQDM Program reports for the first and second quarter of 2015, the Company undertook activities related to developing and managing the TDSM program, which in 2015 were related to virtual building audits and the development of the IDSM tool.

**Customer Engagement – Virtual Building Audits**

Customer and stakeholder engagement is a priority for the Company and is an important component of the TDSM approach. Providing customers with information and opportunities to understand their energy use and identify beneficial opportunities to reduce or manage their consumption is an essential element of such engagement.

Recognizing the need for this engagement, the Company has invested in developing and testing new market approaches. The Company completed a project, initiated in 2014, to develop virtual building audits to prioritize and engage high potential commercial, institutional, and multi-family buildings with demand of 100 kW and above. The costs of audits pertaining to customers in areas not covered under the BQDM Program were recovered as TDSM Program costs, given that they were in targeted networks where forecasted peak demand was approaching constrained levels.\(^8\)

The virtual building audits are evaluations of buildings’ energy profiles and their potential for energy savings, using a combination of publicly available data and building specific consumption data provided by the Company. The audits identify specific areas of opportunity (for example lighting, air conditioning, refrigeration) at a cost much less and a timeframe much

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\(^8\) Available at [http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={AB5AD281-8BBF-4D3D-B466-54BD6E502026}, refer table 1, page 3 and at [http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={43168D9B-2F0A-4DC8-B319-3E772BDFAC42}, refer table 1, page 4, for expenditures related to virtual energy audits. The costs related to BQDM networks were allocated to the BQDM Program and the remaining costs were allocated to the TDSM program.

\(^9\) The TDSM costs are recovered through the Company’s monthly adjustment clause pursuant to Rider 26.1.1 (22), which states that “the Company’s costs on an as-incurred basis, including marketing costs and costs for program evaluation, staffing, program development and market research, for both targeted and other demand management programs that the Company implements or helps to implement as well as any demand management program-related incentives, other than costs addressed in MAC components 19 and 33.”
quicker than an actual physical audit. Such an approach allows resources to be targeted to higher potential properties by conducting focused outreach and resource support, while avoiding the need to conduct time-consuming physical surveys of all of the properties in targeted areas. The Company is making available the virtual audit reports on high potential buildings in nine networks,\(^{10}\) to engage and directly inform customers of beneficial energy efficiency and demand reduction opportunities. The audits are generated utilizing interval meter data where it is available, and monthly data if not, in conjunction with publically available business, building and other data. Customers were encouraged to proactively contact the Company or current contractors to pursue action in regard to the saving areas identified. Additionally, the Company’s account representatives have been trained to assist customers with acting upon the audit reports. Customers may respond to the Company and the responses are forwarded to the Company business development group for follow-up. Business development representatives are available to review reports with customers, encourage their participation in appropriate energy efficiency and demand reduction programs, and facilitate their enrollment in the programs. The business development group is also able to access the reports directly, utilizing the reports as informed leads for their outreach to the customer.

**Integrated Demand Side Management Model**

In 2013, the Company explored options for a comprehensive IDSM market research product, before selecting to expand on a pre-existing model in use by the Company’s affiliate, Orange and Rockland Utilities, Inc. (“O&R”) in November 2013. The Company has now completed an Integrated IDSM Potential Model for the initially targeted networks – a dynamic, geographically specific, and technology integrated analysis tool to assess the market potential and economics of energy efficiency (“EE”) and demand management (“DM”) for cost effective deferral or avoidance of capital expenditures required to meet growing customer demand. The model will allow for better and more detailed customer engagement by identifying EE and DM potential at the technology and customer segment level – specific to the geographic areas in question. The knowledge of these potentials will contribute to the Company’s evaluation of the feasibility of deploying demand side management (“DSM”) to address specific capital

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\(^{10}\) The Company conducted the investigation of nine diverse networks (Crown Heights, Ridgewood, Richmond Hill, Williamsburg, Borough Hall, Cooper Square, Park Slope, Bay Ridge, Northeast Bronx), rather than only the BQDM networks to inform research into opportunities in networks with different demographics.
infrastructure needs and will inform go-to-market strategies. The model goes beyond more traditional energy efficiency measures to give the Company a view into possible deployments of all the commercially available and near-term available technologies applicable to customers in the Company’s service territory. The IDSM model will enhance the Company’s ability to identify and market to network level, high potential market segments.

As the Company continues to seek opportunities for DSM load relief and gains more knowledge about technology potential and market/customer needs, integration of DSM as a load relief solution is anticipated to become a viable tool for the Company, especially as it seeks to evaluate viability and feasibility of DSM in newly identified areas of need. Additionally, the Company is seeking to identify opportunities for DSM deployment in networks that are forecasted to become constrained. With better and faster market evaluation capabilities and tools, the Company will be in a better position to coordinate with and meet the needs to deploy load relief alternatives. Costs of development activities related to IDSM and pertaining to networks covered under the BQDM program were transferred to the BQDM Program with remaining costs recovered through the TDSM program.  

5. **TOTAL RESOURCE COST (TRC)**

The June Order requires that projects funded under the Program pass a TRC-based test to ensure their cost-effectiveness. The Company did not undertake any load relief activities under the TDSM program during the period covered by this report given the shift of activities and resources to the BQDM Program, which is being undertaken under a cost-benefit framework developed specifically for that program.

6. **PROGRAM SPENDING and BUDGET FORECAST**

The Company’s spending through May 31, 2015 when the TDSM program expired, was $167,925; $124,450 related to virtual building audits and $43,475 related to the IDSM tool.

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11. See fn. 9.
7. COST RECOVERY EMBEDDED IN BASE RATES FOR T&D PROJECTS TARGETED

The “net plant reconciliations” mechanism included in the Company’s current rate plan defers the carrying costs for projects that are included in rates, but are reduced.

The Company will defer for the benefit of customers the revenue requirement impact (i.e., carrying costs, including depreciation, as identified in Appendix 8 to the Joint Proposal in Case 13-E-0030) of the amount by which the Company’s actual expenditures for capital programs and projects result in average net plant (excluding removal costs) that is less than the amount included in the Average Plant In-Service Balances (excluding removal costs), as set forth in Appendix 8, for RYI and RY2 for each net plant category herein.12

8. CONCLUSION

The Targeted DSM Program has allowed the Company to actively respond to new and dynamic load needs while being proactive in seeking new, innovative DSM strategies—such as the portfolio of solutions being sought under the BQDM Petition and the new tools such as IDSM.

The development of the BQDM program, in parallel to the REV proceeding, continues to provide valuable lessons which the Company believes need to be integrated into the new targeted program that is currently pending before the Commission.13

13 See fn. 5.