Consolidated Edison Company of New York, Inc.

Request for Information

Innovative Solutions to Provide Demand Side Management to Provide Transmission and Distribution System Load Relief and Reduce Generation Capacity Requirements

ISSUED: JULY 15, 2014

SUBMISSION DEADLINE: SEPTEMBER 15, 2014

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1 Information

Consolidated Edison Company of New York, Inc. (Con Edison) is requesting information from qualified and experienced vendors with the capability to deliver innovative Demand Side Management solutions that provide transmission and distribution system load relief and reduce generation capacity requirements. All material and information provided by Con Edison shall be regarded as confidential information.

1.1 Background

Consolidated Edison Inc. is one of the nation's largest investor-owned energy companies, with almost \$13 billion in annual revenues and approximately \$39 billion in assets. Consolidated Edison Inc. provides a wide range of energy-related products and services to its customers through its two regulated subsidiaries: Consolidated Edison Company of New York, Inc. (CECONY), which provides electric, gas and steam service to New York City and Westchester County and is regulated by the New York Public Service Commission (NYSPSC); and Orange and Rockland Utilities, Inc. (O&R), which provides electric and gas service to Orange County, Rockland County and parts of Bergen and Pike Counties. O&R is regulated by the NYSPSC and the regulatory commissions of New Jersey and Pennsylvania. Consolidated Edison Inc. also has three unregulated businesses: Con Edison Solutions, a retail services company; Con Edison Energy, a wholesale energy supply company and Con Edison Development, an infrastructure development company.

Information that any interested party wishes to submit will be done so voluntarily with the understanding that this RFI is for information gathering purposes only and is not a formal solicitation. RFI responses should outline the vendors' suggested approach and indicative cost for completing the project.

1.2 Proposal Purpose

This RFI solicits responses from qualified parties ("Respondents") stating their interest and qualifications to supply Con Edison with new Demand Side Management (DSM) measures within the targeted load areas served by the Brownsville No. 1 and Brownsville No. 2 substations. These substations support the Richmond Hill, Crown Heights, and Ridgewood networks. Brownsville No. 1 and Brownsville No. 2 area substations are forecasted to be overloaded under normal conditions. The targeted network map can be found in Appendix A.

Operational measures will be employed by the Company to address overloads in years 2014 and 2015. However, due to the inherent temporary nature of the operational measures, a permanent solution is required to address the forecasted summer overloads and defer the need to build traditional utility infrastructure, namely a new area sub-station. Customer and utility side "alternative" solutions are planned to delay the need for the traditional infrastructure solutions. These solutions are needed to address forecasted summer overloads in 2016 (18 MW overload), 2017 (49 MW overload), and 2018 (58 MW overload).

This RFI is the first step in identifying and pre-qualifying contractors for receipt of future RFPs and/or other purchasing actions for specific MW reduction needs, associated targeted geographic areas, and need dates. As the sub-transmission constraint is currently subject to potential overload, solutions that can be deployed rapidly, and

with operational confidence, will be given greater consideration. This RFI is seeking information from innovative solutions providers for potential DSM multiyear "firm contracts" for pre-determined MW needs and delivery.

Targeted areas and characteristics of the Brownsville substations load pockets, where relief is needed, are included in <u>Appendix B</u>. Timing and duration of load reduction needs have been identified as the summer peak load occurring over the months of June through September, Monday to Friday, during the hours of 12pm to 12 am. A graph of the time of day in which the summer peak overload would occur is included in <u>Appendix C</u>.

In addition to the needs within the load area served by Brownsville No. 1 and No. 2 substations, the Company is interested in solutions that may provide value in the context of the potential retirement of Indian Point Energy Center (IPEC). Currently, in partnership with the New York State Energy Research and Development Authority ("NYSERDA") the Company operates an incentive program called the Demand Management Program ("DMP"). The objective of this program is to reduce the demand for electricity during the months of June, July, August, and September on weekdays during the hours of 2pm to 6pm. Respondents are invited to provide comment on the potential to positively impact the needs of the DMP, either as a component of the response to the Brownsville substations need or as a separate discrete solution. Solutions for the DMP need may be located anywhere within the CECONY service territory and can be for a period starting after the potential retirement date of IPEC.

1.3 General Guidelines

Con Edison reserves the right to make changes to this RFI by issuance of one or more addenda or amendments and to distribute additional clarifying or supporting information relating thereto. Con Edison may ask any or all Respondents to elaborate or clarify specific points or portions of their submission. Clarification may take the form of written responses to questions or phone calls or in-person meetings for the purpose of discussing the RFI, the responses thereto, or both.

It is solely the responsibility of each respondent to ensure that all pertinent and required information is included in its submission. Con Edison reserves the right to determine at its sole discretion whether a submission is incomplete or non-responsive.

Respondents should clearly state all assumptions they make about the meaning or accuracy of information contained in this RFI. If you do not ask questions or clarify any assumptions, Con Edison will assume that you agree with and understand the requirements in the RFI. While Con Edison has endeavored to provide accurate information to respondent firms, Con Edison makes no such warranty or representation of accuracy.

Respondent firms are encouraged to provide and release necessary authorizations for Con Edison to verify any of such respondent firm's previous work, except where it is contractually prohibited from doing so pursuant to customer agreements.

This RFI shall not be construed to create an obligation on the part of Con Edison to enter into any contract, or to serve as a basis for any claim whatsoever for reimbursement of costs for efforts expended by respondent firms. Furthermore, the scope of this RFI may be revised at the option of Con Edison at any time, or this RFI may be withdrawn or cancelled by Con Edison at any time. Con Edison shall not be obligated by any responses or by any

statements or representations, whether oral or written, that may be made by the Company or its employees, principals or agent.

Any exceptions to the terms, conditions, provisions, and requirements herein must be specifically noted and explained by a respondent firm in its response to the RFI. Con Edison will assume that any response to this RFI expressly accepts all the RFI terms, conditions, provisions and requirements, except as expressly and specifically stated by a respondent firm in its response to the RFI.

Participating respondent firms agree to keep confidential all information provided by Con Edison in connection with this RFI.

Examples of Con Edison's disclosure and standard terms and conditions can be found using the following link: http://apps.coned.com/purchasing/tc.asp

1.4 RFI Schedule

Responses and supporting attachments are to be submitted electronically via the internet as a PDF and excel attachment as an email to DSM@coned.com.

RFI Milestones	Completion Date*	
Issue RFI	July 15, 2014	
Last day to submit clarification	August 15, 2014 by 5:00 PM EDT	
Questions		
Con Edison Publishes Responses to	August 31, 2014	
Questions		
Proposal Submission Deadline	September 15, 2014 by 5:00 PM	
	EDT	

^{*}Con Edison reserves the right to change any of the above dates.

2 Solution Requirements

This section outlines the requirements for responses to the RFI. Functional Questions are included in **Attachment A, which should be submitted with the Respondents proposal**. Please answer these questions in detail and to the best of your ability and attach when submitting your proposal. Any additional information you would like to provide about the proposed solution to give more clarification on how it can achieve the required demand reduction, can be included, as an attachment (maximum size – 2 MB), but review priority will be given to the information provided within the provided format.

2.1 Professional Background and Experience with the Proposed Solution

Respondents should provide a brief outline of their Company, leadership, financial position and the services offered. Respondents should describe the following:

Executive Summary of proposal

- Highlight where you have performed industry specific work that is similar in nature and relevant to the
 Demand Side Management solution requirements with particular emphasis on implementation of the
 solution at other utilities, large municipals, co-ops, or any other applicable facilities.
- Relevant project experience
- Provide financial statements for the past three years
- Partnership secured or needed (e.g. subcontractors, community groups, etc.)
 - Technology/Solution description
 - Tested and proven or innovative
 - O Where else has the technology been deployed?
 - O What are performance characteristics of the technology?
 - o How it will the solution address the Brownsville substation challenge?
 - How it will address the IPEC challenge, if applicable?
 - o Innovation risks, barriers, challenges, etc.
- Respondents should address any estimated costs associated with implementing the proposed solution, including customer and utility costs, as well as any other relevant costs. Respondents should also describe in detail non-energy benefits associated with the proposed solution
- List and contact information of customers were the solutions were implemented and note whether Con Edison can contact these customers for more information?
- Any other relevant information that you deem appropriate and noteworthy that supports and validates the proposed solution.

2.2 Project Proposal Requirements

Respondents are encouraged to submit alternative, creative proposals for DSM marketing, sales, financing, implementation, and maintenance, or transaction structures and pricing formulas that will achieve the demand reductions sought and maximize value to Con Edison's customers.

The selected Respondents, if subsequently contracted to provide their solution, will be required to provide full facility and equipment access to the Company and its representatives for pre- and post-installation inspections to verify the installations and the demand reductions, and for subsequent inspections (which may be performed at the Company's discretion), to verify continued operation and maintenance of the DSM measures for the applicable term.

The new DSM measures must be in service, and the pledged demand reduction must be guaranteed to commence, by the respective need dates for the applicable load area, to address forecasted summer overloads in 2016 (18 MW overload), 2017 (49 MW overload), and 2018 (58 MW overload).

Financial assurances will be required to ensure that the committed amount of DSM measures will be installed and the committed in-service date for each measure will be met. Failure to achieve the committed demand reductions or to meet the committed in-service dates will result in penalties which will be established during the contracting phase.

The proposal should specify the data and methodology used to determine the estimated demand reduction and annual kWh savings attributable to each DSM measure proposed to be installed.

Respondents proposing to market the installation of DSM measures to others should include a full and complete assessment of the DSM opportunities. At a minimum, this assessment should include a description of the markets, such as one-to-four family homes, multifamily buildings, small commercial (e.g., retail stores, restaurants), large commercial (e.g., office buildings, industrial) and government or institutional (e.g., hospitals, hotels, schools, colleges), and the applicable DSM measures and technologies to be directed at each selected market or customer segment. In addition, Respondents should illustrate the marketing and sales strategies that will be employed to capture the selected market or customer segment and to deliver the demand reductions included in their proposals. Preference will be given to Respondents which have pre-existing customer agreements to deploy the solution.

Respondents may also include proposals that require deployment on utility property or ownership models involving ownership, or operation and maintenance, or both, by the Company.

Of key importance to the review of any proposal is consideration of community impact. Proposals must provide information on elements of the proposal that affect the community (both positive and negative) including, but not limited to, associated GHG emissions, waste streams and management, job creation potential and community disruption.

The Company is interested in proposals which will take advantage of funding available from other funding streams. In order to mitigate the cost impact on the Company's customers it will be important to maximize the use of existing City, State and Federal funding opportunities. The ability to unleash private sector funding should also be identified. Detailed explanations and validation of such funding strategies will be expected to provide examples which are provable and repeatable.

Please note that information any interested party wishes to submit is done so voluntarily with the understanding that this RFI is for information gathering purposes only and is not a formal solicitation.

2.3 Functional Requirements

Respondents have been provided a detailed Functional Questionnaire in Attachment A. Please provide your responses in the document and submit with the RFI proposal. Major categories within the functional questions include:

- Respondents go-to-market strategy
- Measurement & Verification confidence plan
- Other Funding Sources Available
- Environmental and Community Impacts
- · Respondents Market Understanding
- Proposed Solution Benefits
- Other Funding Opportunities
- Other Additional Information can be included if appropriate to clarify or further explain your response

3 Instructions to Respondent

Respondents are instructed to prepare the proposal response in accordance with the instructions outlined below, with the proposal focused on the Solutions Requirements (Section 2) and as well as a required submittal of the Functional Questionnaire Responses as a separate attachment. Respondents should also provide:

- 1. A proposed project plan and a breakdown of costs (utility and customer sided) to implement the solution; and
- 2. All partnerships or other relationships (if any) with other third parties to support or perform a particular function.

3.1 Proposal Response and Submittal Instructions

Please format the email subject line as follows: "Company Name"-2014 BQDM RFI E.g. Subject: ABC Company-2014 BQDM RFI

Responses delivered by hand or fax, regular mail, or any other method will not be accepted. Con Edison will not be responsible for late, lost, illegible or misdirected submissions.

Review of responses submitted to this RFI will be coordinated through the Con Edison Energy Efficiency and Demand Management Department and other company departments as necessary. Con Edison may, at its option, contact Respondents with additional questions or information requests. Additional action by Con Edison related to this RFI is solely at the Company's option, and as such, the company has no obligation whatsoever to address questions, comments, or information requests related to this RFI after receipt of Respondents responses.

Any questions or needed clarifications concerning this RFI should be directed to Con Edison at DSM@coned.com. The deadline to submit questions via email is 5:00 PM EDT on August 15, 2014. Emailed questions received after this date will not receive a response. Con Edison will not respond to any questions received in-person, by mail, by fax, or by phone. A summary of all questions submitted and the corresponding answers will be submitted via email to all potential Respondents by August 31, 2014.

3.2 Solution Review Approach

Solutions proposed in response to this RFI will be reviewed by Con Edison. Some of the main review criteria of the qualified proposals received are listed below. This process is designed to be fair and equitable, with the objective of potentially anticipating selecting a solution(s) that provide the greatest overall value.

Evaluation criteria will include but not limited to:

Respondent Proposal Viability- the extent to which the Respondents proposed solution would fit into the needs of the targeted networks

Proposed Solution Functionality -the extent to which the proposed solution would meet the defined functional requirements

Environmental and Community Impacts associated with the solution

Cost-the cost effectiveness of the proposed solution

Timeliness- the ability to meet Con Edison's schedule and project deployment requirements

Price and reliability - compared to other solutions

Respondent Qualifications- the relevant experience and success providing these solutions to other locations, including reference checks and documented results

Respondents should note that if Con Edison has reviewed the solution, it is not a guarantee that the solution will be selected. Con Edison has requested the proposals for informational gathering purposes and this RFI is not a formal solicitation.

3.3 Proposal Response Format

The written proposal response for the Demand Side Management solution should be organized as follows:

Proposal Section	Proposal Section Title
n/a	Cover Letter
n/a	Table of Contents
1	Professional Background, Financials and Experience with the Proposed Solution (a described in Section 2.1)
2	Proposed Solution Response & Project Plan (as described in Section 2.2)
3	Costs Associated with the Proposed Solution
4	Assumptions & Exceptions
Appendix	Glossary of Terms
Attachment	Functional Questionnaire Response

3.3.1 Cover Letter

The cover letter shall include the following:

- The legal name and address of Respondent;
- The name, title and telephone number of the individual authorized to submit information; and

• A statement that the Respondent is read, understands, and agrees to all provisions of the RFI and acknowledging that this is just for informational purposes and not a formal solicitation

3.3.2 Table of Contents

Include a clear identification of the proposal by section and by page number as identified above.

3.3.3 Professional Background & Experience with the Proposed Solution

This section is for the Respondent to provide an executive overview and summary of your company and general description of the key features of your solution. It should include the items outlined in Section 2.1 of the RFI.

3.3.4 Proposed Solution & Project Plan

This is a response to the solution requirements as outlined in this document. Respondents should also provide a proposed project plan for the solution.

3.3.5 Costs associated with the Proposed Solution

Respondents should provide a detailed breakdown of the costs associated with implementing the proposed solution.

3.3.6 Assumptions & Exceptions

Respondent should provide a list of assumptions made in developing the response to this RFI that should be considered when evaluating the response.

Respondent should provide a stand-alone section listing any exceptions to the RFI (i.e. – indicate which deliverables of the RFI they cannot meet).

3.3.7 Glossary of Terms

Respondent should provide a glossary of terms that is specific to the Respondents solution.

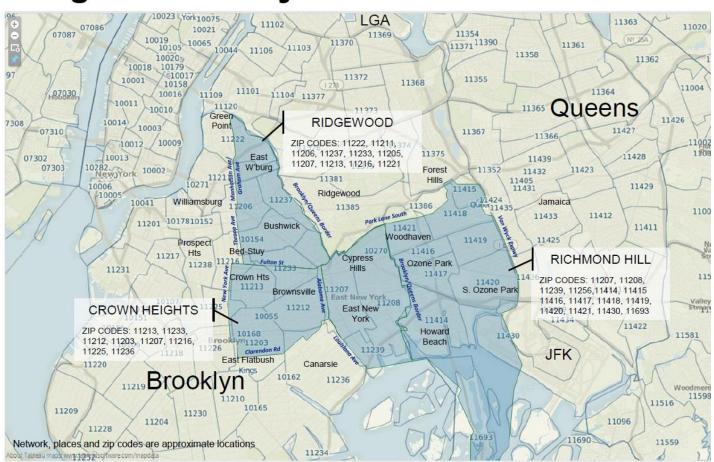
3.3.8 Functional Questionnaire

Respondents should attach the responses to the Functional Questionnaire, including as much detail possible, with the RFI submittal.

4 APPENDICES

APPENDIX A- Targeted Brooklyn-Queens Network Map

Targeted Brooklyn-Queens Networks



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APPENDIX B-Targeted Network Profile

Borough: QN. Network: Richmond Hill - QN				ΣN
	Account Counts		High Demand	
Segments		Consumption	1 Year**	Max kVA
Education	90	24,433,651	10, 430	11,989
Entertainment	27	4,438,601	1,956	2,248
Gro ce ry	219	19,501,751	4,954	5,694
Hospital	7	688,840	231	265
Industrial	214	15,031,384	5,515	6,339
Lodging	4	965,348	407	467
Miscellane ous	2,086	109,364,669	34,341	39,473
Multi Family >=5	12,080	54,492,011	20,956	24,088
Multi Family 1-4	64,919	358,545,652	131,781	151,473
Nursing Home and Community Care	61	13,429,223	3,893	4,475
Office	5,647	83,267,366	34,658	39,837
Re staurant	371	25,882,170	8,674	9,970
Retail	1,169	41,614,241	17,744	20,395
W arehouse	49	1,183,872	690	793
Total	86,943	752,836,776	276,231	317,507

Borough: BK. Network: Richmond Hill - BK				
	Account Counts		High Demand	
Segments		Consumption	1 Year**	Max kVA
Education	55	19,577,362	8,327	9,572
Entertainment	47	4,073,261	1,481	1,680
Grocery	193	17,233,273	4, 456	5,122
Hospital	6	1,175,531	365	420
Indu strial	158	10,952,850	5,378	6,181
Lodging	7	1,375,857	505	581
Miscellane ous	1,015	74,052,231	20,423	23,474
Multi Family >=5	8,008	90,044,322	24,849	28,562
Multi Family 1-4	29,892	156,076,563	55,856	64,202
Nursing Home and Community Care	88	22,548,751	7,313	8,408
Office	4,651	80,164,409	29,781	34,231
Restaurant	218	18,385,501	5,581	6,415
Retail	793	47,925,569	16,953	19,488
W arehouse	54	2,799,550	1,409	1,620
Total	45,181	546,385,030	182,658	209,951

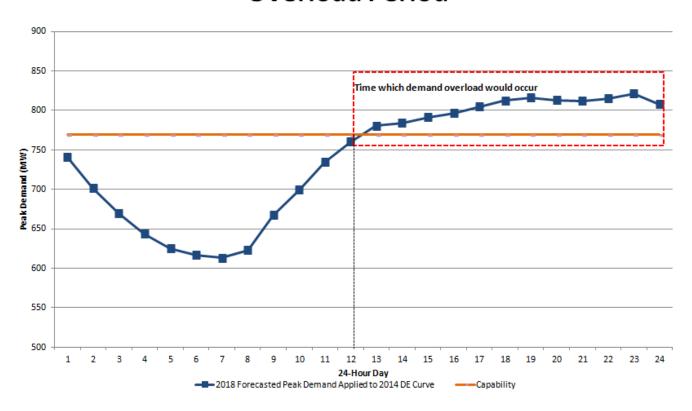
^{**}High Demand at custromer specific peak, not tied to network peak time

Borough: BK. Network: Crown Heights				,
	Account Counts	Annualized	High Demand	
Segments		Consumption	1 Year**	Max kVA
Education	145	37, 459, 380	14,700	16,897
Entertainment	28	2, 265, 271	741	851
Grocery	280	27, 296, 287	7,199	8,275
Hospital	45	111,026,339	22,231	25,553
Industrial	286	13,943,767	5,198	5,975
Lodging	9	1,848,483	594	682
Miscellaneous	1,770	40,791,827	17,416	20,018
Multi Family >=5	33,614	223, 482, 090	67,728	77,848
Multi Family 1-4	39,890	198, 057, 112	72,410	83,230
Nursing Home and	262	21,918,494	6,741	7,748
Community Care				
Office	7,801	178, 936, 103	59,555	68,454
Restaurant	312	18, 445, 732	5,579	6,412
Retail	1,251	60, 328, 483	25,484	29,292
Warehouse	34	1, 189, 103	667	767
Total	85,725	936, 988, 471	306,243	352,003

l	Borough: BK, Network: Ridgewood				
ı		Account Counts	Annualized	High Demand	
ı	Segments		Consumption	1 Year**	Max kVA
1	Education	94	30,175,651	11,848	13,617
	Enterta inment	31	1,822,098	673	773
•	Grocery	384	31,368,383	8,679	9,976
3	Ho spita I	17	31,381,210	6,501	7,473
j	Industrial	388	32,400,833	14,353	16,498
2	Lodging	5	124,772	54	62
3	Miscellaneous	2,557	65,750,138	29,168	33,524
	Multi Family >=5	31,681	180,610,043	58,052	66,726
9	Multi Family 1-4	40, 459	184,524,979	68,796	79,076
	Nursing Home and	181	17,662,077	6,728	7,733
1	Community Care				
۱	Office	11,299	225,577,160	78,101	87,472
2	Restaurant	420	26,086,622	8,399	9,654
2	Retail	1,441	85,518,962	37,933	43,601
1	W are house	177	7,907,668	3,653	4,199
	Total	89, 134	920,910,590	330,934	380,384

APPENDIX C- Summer Peak Overload Graph

Brooklyn-Queens Load Pocket: Summer Peak Overload Period



Note: The expected number of hours of overload is generally in the range of 40 – 48 hours, occurring in the summer months.