STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 15-E-0751 - In the Matter of the Value of Distributed Energy Resources.

NOTICE SOLICITING COMMENTS AND PROPOSALS ON AN INTERIM SUCCESSOR TO NET ENERGY METERING AND OF A PRELIMINARY CONFERENCE

(Issued December 23, 2015)

TAKE NOTICE that interested parties are invited to file comments, in the form of answers to some or all of the questions set forth in **Attachment A** to this Notice, and in the form of detailed proposals for an interim successor to NEM tariffs in New York State. **Responses should be filed with the Secretary on or before Monday, April 18, 2016**.

TAKE FURTHER NOTICE that a preliminary conference, before an Administrative Law Judge assigned by the Public Service Commission in the above-captioned proceeding, will be held on Thursday, January 7, 2016, commencing at 9:00 a.m. and concluding by 12:00 p.m. in the Boardroom, 19th floor, Three Empire State Plaza, Albany, New York. The conference will be webcast at **http://bcove.me/riw4a8le**.

The purpose of the preliminary conference is to provide interested parties additional guidance and an opportunity to ask questions and seek clarification about the process and scope of a matter being undertaken by the Department of Public Service to develop an interim successor to net energy metering tariffs in New York State.

Moreover, to provide the parties additional guidance, it is likely that similar sessions will be held prior to the April 18, 2016 deadline for filing responses to the questions attached to this notice.

(SIGNED) KATHLEEN H. BURGESS
Secretary

ATTACHMENT A

Case 15-E-0751 - In the Matter of the Value of Distributed Energy Resources

Questions on the Value of Distributed Energy Resources and Options Related to Establishing an Interim Methodology

I. Introduction

1. Background

The Commission has stated that achieving a more precise articulation of the full value of distributed energy resources ("DER") is "a cornerstone REV issue."[1] In its order authorizing the commencement of Community DG programs, the Commission directed Staff to initiate a matter to establish valuation methods for DER.[2]

The Commission subsequently ordered, in the context of establishing floating capacity limits for Net Energy Metering (NEM) through 2016, that a matter be initiated to establish a methodology for valuing DER and designing rates for DER providers. While no express deadline was established for completing the development of a methodology for valuing DER, the Commission noted that "the development of the tools and methodologies required to fully implement an approach [for valuation of DER] on the 'Value of D' is likely a long term effort." The Commission also concluded that "there is sufficient time to develop and adopt more precise interim methods of valuing DER benefits and costs, as well as the design of

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1 Case 15-E-0082, Proceeding on a Community Net Metering Program, Order Establishing a Community Distributed Generation Program and Making Other Findings, (July 17, 2015) p. 24 (CDG Order).

2 CDG Order, p. 36. The CDG Order directed Staff to file a report on the outcome of this process by January 15, 2016. That deadline has been subsumed by the matter undertaken here.

appropriate rates and valuation mechanisms before December 31, 2016."[3] Such measures can serve as a bridge while the complete 'value of D' tools and methodologies are developed.[4]

This document commences the Commission-ordered matter to address two closely related tasks: (1) identify for the Commission an interim approach to valuing DER including a transition plan for moving from net metering to DER valuation that can be adopted prior to December 31, 2016; and (2) establish a methodology and process for determining the full value of DER for the larger purposes of developing DER compensation mechanisms built upon an LMP+D approach.

2. Related Proceedings

In the Staff White Paper on Ratemaking and Utility Business Models ("Track Two White Paper"), Staff discussed the approach to more accurately identify and quantify the value of DER resources by the formula LMP + D, where "LMP" represents the location-based marginal price of energy, and "D" represents the full range of additional values provided by the distribution-level resource.[5] The Commission approved this approach as the starting point for further analysis by stakeholders, stating that LMP+D represents "the full value of a distribution-level resource on a time and location specific basis." In the NEM Interim Ceilings Order, the Commission further elaborated that "[the] 'value of D' can include load reduction, frequency regulation, reactive power, line loss avoidance, resilience and locational values as well as values not directly related to delivery service such as installed capacity and emission avoidance."[6]

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[3] Case 15-E-0407, Orange and Rockland Utilities, Inc. – Petition For Relief Regarding Its Obligation to Purchase Net Metered Generation Under Public Service Law §66-j, Order Establishing Interim Ceilings on the Interconnection of Net Metered Generation (issued October 16, 2015) p. 14 (NEM Interim Ceilings Order).

[4] NEM Interim Ceilings Order, at pp. 9, 11, & 15.

[5] Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Staff White Paper on Ratemaking and Utility Business Models (issued July 28, 2015) p.75 (Track Two White Paper).

[6] NEM Interim Ceilings Order, p. 9.

In the Track Two White Paper, Staff also recommended that the bill crediting mechanism used in NEM should continue to be considered as part of a successor to NEM, and that changes to NEM should be focused on larger projects with substantial net export of electricity.[7]

The "value of D" takes different forms and values depending on the application. For example, the first major application for the "value of D" is valuing alternatives to long term investments such as traditional utility investment, investment in DSP infrastructure and non-wire alternatives. A second application is compensation mechanisms, which includes rate design, LMP+D payments, as the basis for the transition from NEM. Staff's Benefit Cost Analysis Framework White Paper ("BCA White Paper") identified and discussed benefit and cost components to be applied in four areas: (1) utility investments in distributed system platform capabilities; (2) procurements of DER through selective processes; (3) procurements of DER via tariffs; and (4) energy efficiency programs.[8]

The Commission's eventual adoption of a BCA Framework will partially or entirely define the categories of benefits and costs for these applications, which will provide an important foundation for DER valuation. However, the BCA Framework, in and of itself, may be insufficient to represent the full value of DER in certain applications. Further, there remains a need to design compensation mechanisms based on those categories of benefits and costs.

3. The Value of DER and Transition from NEM

This matter emanates from the Commission's conclusion "that a single comprehensive process should be embarked upon to adequately address the range and complexity of the questions raised [in this matter]. The answers to these questions will lead to the adoption of the more precise valuation of DER contemplated in REV, upon the development of the appropriate accompanying rate design and the determination of the strategies alternative to the current approach of identifying specific, and

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7 Track Two White Paper, p. 108

8 Case 14-M-0101 Staff White Papers on Benefit-Cost Analysis in the Reforming the Energy Vision Proceeding (July 1, 2015), p. 1 (BCA White Paper).

therefore restricted market and customer segments eligible for net metering."[9] The objective of this matter is to identify, examine and clarify specific proposals and mechanisms for valuing DER and, most immediately, to define a near-term transition from NEM. Because the Commission has established a deadline for the first task, the initial focus of this inquiry will be on developing an interim methodology of valuing DER. However, since much of the information, data, and analysis involved in establishing an interim transition, including but not limited to the transition from NEM, will be directly applicable to achieving the long term goal of developing full valuation for compensation in DER markets, the two tasks initiated by the Commission necessitate parallel, as opposed to sequential consideration. The Governor's recently announced mandate to require that 50% of the energy consumed in New York State be provided by renewable resources by 2030 may have an influence on the issues considered as part of this matter. Any implications can and will be considered as details of this initiative become known.

The matter will be led and facilitated by an Administrative Law Judge (ALJ) and will involve the opportunity for parties to directly question other parties' as they relate to matters of fact. As an initial step in the process, this document introduces two sets of questions to seek substantive answers from interested parties. To the extent applicable, respondents should provide support for their responses in technical appendices. The opportunity to engage in limited discovery will be established by the ALJ. Accordingly, parties submitting responses and/or proposals should be prepared to respond to requests for supporting materials.

Because the Commission is expected to act on the list of BCA benefit and cost categories, on which parties have commented, it would be unproductive for parties to reargue these issues within the inquiry described here. For that reason, the benefit and cost categories identified in Staff's BCA White Paper should be used by parties until the Commission has acted. Parties may express and identify any reservations regarding the White Paper benefit and cost categories, but should use the White Paper categories as the basis of their analysis.

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[9] NEM Interim Ceilings Order, p. 14.

Following the filing of responses to questions posed in this document and subsequent discovery, the ALJ will establish a further process for parties to examine and comment on each other's proposals and assertions, to enhance the record for the Commission's ultimate decision. The precise form of this process will be at the discretion of the ALJ, taking into consideration the number of active parties, the extent and nature of disagreements to be resolved, the timeline established by the Commission, and other relevant factors.

Parties that do not wish to make specific proposals, engage in discovery, or offer responses that are subject to discovery, may submit statements of general policy that should be clearly labeled "Policy Statement". Such policy statements will be taken into account, but the weight of any specifics contained in a policy statement will reflect that it has not been subject to examination by other parties.

Interested parties are invited to contribute their own analyses and research. As mentioned in the O&R Order, staff will also make available ongoing research addressing the development of competitive market tools, pricing structures, and full value tariffs that is being conducted with the assistance of consultants. That work will soon be concluded and made available to interested parties for reference in the preparation of comments. We emphasize that those reports, as well as the recently filed study of the benefits and costs of NEM in New York, are <u>not</u> intended are Staff proposals. Rather, they are expressly intended to serve as resources to parties and Staff. Parties will not be required to specifically comment upon or refer to these documents but may, in their sole discretion, refer to them in the filings made in response to the questions presented below, and in any accompanying proposals.

II. <u>Questions for Party Response</u>

With this effort, we are seeking to identify, examine and clarify possible proposals, to the extent they exist. Additional work will be required, based on the foundation of proposals submitted, to develop and finalize the interim method of valuing DER benefits and costs including adequate rate designs. Two sets of questions are presented. The first set of questions focuses on NEM successor options, while the second set focuses value methodology approaches. To avoid undue burden on parties, they may respond to the questions in part.

Responses to the questions should be filed with the Secretary on or before Monday, April 18, 2016.

To provide additional guidance to the parties, pursuant to the notice issued in conjunction with this document, a preliminary conference will be convened in Albany on Thursday, January 7, 2016. The purpose of that conference will be to provide an opportunity for interested parties to ask questions about the process and scope of this matter. An ALJ will preside over that conference. Moreover, to provide the parties additional guidance, it is likely that similar sessions will be held prior to the deadline for filing responses to the questions posed herein.

A. Proposals for Interim Methodologies

While questions of the benefits and costs of NEM as it is currently configured are closely related to the development of an approach to valuing DER, it will be more productive to address the issues in constructive forward-looking context.[10]

1. Identify and describe, in as much detail as possible, a mechanism or mechanisms to more precisely value DER as bridge, as currently effectuated in tariff today, while the complete value of D tool and methodologies are developed.[11]

2. For each mechanism proposed, or for any mechanism ultimately adopted, identify the input assumptions and the types of benefits and costs relevant to the mechanism, including analysis of their relative significance in magnitude.

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[10] In light of the task the Commission has established for this matter, a proposal to maintain NEM in its current form for all customers, or a proposal to eliminate NEM without establishing a successor that satisfies the Commission’s policy goals, will not be entertained in this forum.

[11] Alternatively, as described above, describe how the values discussed in the questions ought to be reflected in any mechanism that is ultimately adopted.

3. How can the contractual and financial expectations of existing projects be respected?

4. Bill impacts are a critical metric for assessing any proposal. How should bill impacts be identified and analyzed? What criteria should be employed to assess the bill impacts of a given proposal?

5. For each mechanism, describe with as much specificity as possible:

   A) The benefits and costs to:
      i) participants;
      ii) non-participants; and
      iii) society

   B) How the benefits and costs vary when the customer is demand billed versus non-demand billed.

   C) How the benefits and costs vary when the project is targeted to a system need versus randomly distributed.

   D) How the mechanism applies to energy injections into the grid, versus load reduction.

6. Describe how the mechanism would affect and reflect:

   A) More accurate and precise value signaling

   B) Simplicity in the customer experience and ability to encourage customer adoption.

C) The Commission's REV policy objectives[12]

7. Describe how the mechanism would be consistent with current or foreseeable enabling technology.

8. Describe the extent to which the mechanism relies on changes in rate design, including whether rate design changes to implement the mechanism would apply only to participating customers or apply to all customers.

9. Describe the implications of the mechanism for fair, efficient, and sustainable recovery of distribution system costs.

10. Describe the implications of the mechanism for fair, efficient, and sustainable customer investment.

11. Describe the extent to which the cost of providing distribution service to individual customers utilizing DER is or could be avoided by the DER.

12. Describe how a mechanism would focus on, or apply to:

    A) Residential or small commercial (*i.e.*, non-demand-billed) on-site projects.

    B) Demand-billed projects whose output is not substantially greater than the load at the meter.

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[12] These would include the policy objectives identified by the Commission in its order instituting the REV proceeding (as well as any other policy objectives subsequently identified the Commission): (1) enhanced customer knowledge and tools that will support effective management of the total energy bill; (2) market animation and leverage of customer contributions; (3) system wide efficiency; (4) fuel and resource diversity; (5) system reliability and resiliency; and (6) reduction of carbon emissions. Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, <u>Order Adopting Regulatory Policy Framework and Implementation Plan</u> (issued February 26, 2015), p. 4.

C) Large projects whose output is substantially greater than the load at the meter (*e.g.*, Remote Net Metering, Community DG).

13. Provide illustrations of how the proposed compensation mechanism would be applied. Issues for attention should include (but do not need to be limited to):

    A) Is accounting accomplished via bill credits or via some other mechanism?

    B) Is generation netted against consumption or are energy flows accounted for separately?

    C) Is measurement and/or accounting of generation conducted on a volumetric or a monetary basis?

14. Describe anticipated impacts on participating and non-participating low income customers.

15. Describe how the mechanism would distinguish, if at all, between solar PV and other technologies currently eligible for NEM.

16. Describe how the mechanism would, if at all, account for the value of emissions reductions.

B. <u>Developing a Full Valuation Methodology</u>

The following additional questions provide line-of-sight to the continuation of the process beyond the development of interim “bridge” methodologies.

17. Describe how a full valuation mechanism should account for the following:

    A) Variations in benefits and costs between generation that is dispatchable and generation that is variable or intermittent.

    B) Which types of benefits and costs should be valued on a fixed basis or on a dynamic basis?

C) For those components where a fixed value is proposed, how often would the value be updated, and by what process?

D) For those components where a dynamic value is proposed, identify the dimension(s) which should be variable (*e.g.*, temporal, locational, service class, gross usage, and the like).

18. Describe whether a valuation mechanism should be adjusted for time-varying rates. If a customer is billed on a time-varying rate:

A) How would measurement and/or accounting for time-varying rates be handled? (*e.g.*, How will generation be metered and credited against time periods with differing rates charged to customers?)

B) Would compensation be adjusted to reflect other time-varying elements of system value irrespective of whether a customer's consumption is billed with time varying rates?

C) How would compensation be applied to other aspects of a customers' bill (*e.g.*, fixed charges, demand charges, etc.)?

D) How would these mechanisms be applied to on-site DER compared to offsite or remote DER?

19. Describe how the mechanism would balance price stability and risk mitigation (to facilitate market development) against the objective of accurate and dynamic price signals.

20. Describe the extent to which the system value of a single DER project may be a function of the degree of networked DER penetration (e.g., the total amount of DER on a particular circuit serving a similar set of system values).