

August 14, 2015

Hon. Kathleen H. Burgess Secretary to the Commission New York State Public Service Commission Agency Building 3, 19th Floor Albany, NY 12223-1350

Subject: CASE 14-M-0094 – Proceeding on Motion of the Commission to Consider a Clean Energy Fund.

Dear Secretary Burgess:

Submitted for filing herewith in the above-entitled case are "Comments of the New York Independent System Operator, Inc. on the Clean Energy Information Supplement" in response to the Commission's July 2, 2015, *Notice Regarding Comments, Informational Webinars, and Filing of Frequently Asked Questions*.

Please contact me at (518) 356-6220 or at cpatka@nyiso.com if you have any questions or concerns.

Very truly yours,

/s/ Carl F. Patka
Carl F. Patka
Assistant General Counsel
New York Independent System Operator, Inc.
10 Krey Boulevard

Rensselaer, New York 12144

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Consider a Clean Energy Fund

Case 14-M-0094

Comments of the New York Independent System Operator, Inc. on the Clean Energy Fund Information Supplement

I. Introduction

The New York Independent System Operator, Inc. ("NYISO") respectfully submits these comments in the above-captioned proceeding. It has prepared these comments in response to the New York Public Service Commission's ("the Commission" or "NYPSC") July 2, 2015 (amended July 15, 2015) *Notice Regarding Comments, Informational Webinars, and Filing of Frequently Asked Questions* ("July 2 Notice").

A. Background

On September 23, 2014, the New York State Energy Research and Development Authority ("NYSERDA") submitted, to the NYPSC, its *Clean Energy Fund Proposal* ("September 23 Proposal"). The NYISO responded to that document with comments in which it expressed its support of NYSERDA's proposed strategies for program evaluation, and stressed the importance of the continued application of comprehensive evaluation, measurement, and verification ("EM&V") methodologies to New York's energy programs as they evolve. In accordance with the directives of NYPSC's November 6, 2014 *Notice Soliciting Comments*, NYSERDA submitted on June 25, 2015, its *Clean Energy Fund Information Supplement* ("the

¹ Comments of the New York Independent System Operator, Inc. on the Clean Energy Fund Proposal, December 8, 2014.

Supplement") which, it states, completes and replaces its September 23 Proposal.

B. The NYISO's Interest and Position in this Proceeding

The NYISO is an independent not-for-profit entity that is responsible for the reliable operation of the bulk power transmission system in New York State, for planning of that system's continued reliability, and for administering competitive wholesale electricity markets. Central to the NYISO's planning responsibilities is the preparation of long-term zonal energy and peak load forecasts. A factor in the development of accurate forecasts is the NYISO's analysis of the zonal impact of energy efficiency measures conducted via programs overseen by NYSERDA, New York's Transmission Owners ("TOs"), New York Power Authority, and Long Island Power Authority ("Power Authorities"). Accordingly, the NYISO has a strong interest in the Clean Energy Fund ("CEF") and how its various elements impact energy usage over time and throughout the state. The NYISO's comments below address specific aspects of the Supplement, and are laid out in order of the section headings used in the Supplement, as instructed by the July 2 Notice. While the NYISO does not comment herein on all aspects of the CEF proposal, it may expand the scope of its consideration in future opportunities to comment as the proceeding unfolds.

The NYISO reiterates its support of the Commission's clean energy and energy efficiency proceedings, and applauds the achievements realized through the cooperation and exchange of information between NYISO, NYSERDA, the NYPSC, and TOs and Power Authorities under those proceedings. With the following comments, the NYISO: (i) supports NYSERDA's proposed strategies for program evaluation; (ii) stresses the importance of continued application of comprehensive EM&V methodologies to New York's energy programs as they evolve; and (iii) provides important information as to what evaluation methods and

measures are most compatible with planning for the ongoing reliability of the bulk power system.

II. Comments

A. (6) Market Development Initiatives and Evolution of Previously Authorized Programs

In section 6.9.1 of the CEF Information Supplement, NYSERDA discusses the benefits and challenges of energy storage technologies. The NYISO supports the role that storage technologies and processes can and should play in the Reforming the Energy Vision ("REV") and the CEF initiatives. The economic value of battery storage technologies that are applied on a distributed basis for solar PV and other distributed energy resources may be understated, especially if the overall system costs of intermittent energy resources in real time are not properly recognized. A study that establishes a cost threshold below which storage technologies produce a positive net benefit from a societal perspective would be of great interest, since there is a major effort nationwide to reduce storage technology costs. Assembly of a group such as the one the NYISO discusses below, comprised of experts from entity participants in these proceedings, could facilitate development of such a study.

B. (9) Evaluation, Reporting and Transparency

Given its role in developing load forecasts, discussed above, the NYISO strongly supports EM&V efforts and recognizes that the REV and the CEF will need to account for market transformation impacts through market baseline studies and other similar approaches. In section 9.2.4 of the CEF Information Supplement, NYSERDA discusses market characterization and market progress studies. The NYISO suggests that a focus be placed on peak impacts and impacts from one time of the day to another, and from one month to another. The NYISO

benefitted from participation in the Evaluation Advisory Group ("EAG") that was established as part of the Energy Efficiency Portfolio Standard ("EEPS"). The EAG provided valuable information in the form of process evaluations (useful in making midcourse improvements in programs), in developing and maintaining the Technical Reference Manual (a valuable resource for documenting data used to determine program and measure impacts) and in providing a forum for the exchange of EM&V metrics among all EEPS stakeholders. The NYISO planning staff made frequent reference to the Technical Reference Manual when developing forecasts of energy efficiency impacts. A group similar to the EAG should be established for the CEF, with a mission statement and membership consistent with the goals and objectives of the REV.

In section 9.3 of the CEF Information Supplement, NYSERDA addresses the evaluation budget. The 2016 evaluation budget of \$15 million is comparable to the 2015 EEPS evaluation budget and the NYISO believes this to be appropriate. The CEF Information Supplement discusses evaluation budget as follows (pg. 153).

"The Evaluation budget will be reassessed periodically based on implementation and evolution of plans, and will be adjusted by NYSERDA, if necessary, to ensure it is providing the level of feedback and accountability needed by its own administrators and for PSC oversight."

The NYISO believes this is a fitting strategy at the beginning of the CEF implementation period. After a period of one or two years, it may be useful to revisit the level of funding required. The NYISO suggests that the desired levels of feedback and accountability can be provided for in a transparent manner by permitting stakeholders to participate in a body such as the EAG, as established by the NYPSC.

In section 9.4 of the CEF Information Supplement, NYSERDA discusses reporting. With the REV, CEF, and related proceedings, the Commission has embarked upon an ambitious undertaking to change the landscape of electric utility markets and operations. While this

document is directly concerned with NYSERDA's Clean Energy Fund, the scope of the effort in its broadest context affects the NYISO, the TOs, Power Authorities, and all sectors of energy service providers, suppliers and consumers. The NYISO recommends that a centralized reporting framework be established so that it is relatively straightforward to obtain information about activity related to the REV, the CEF, Renewable Portfolio Standard, the Green Bank, and other elements of the state's energy policy initiatives. This should be the case regardless of whether the program is delivered by NYSERDA, one of the state's utilities or power authorities, or any other entity.

C. (12) Budget and Benefits

In section 12.7 of the Clean Energy Fund Information Supplement, NYSERDA recommends establishing four primary metrics (page 184):

- GHG emissions reductions;
- Customer bill savings;
- Energy efficiency and clean energy generation; and
- Mobilization of private sector capital.

NYSERDA then continues with a discussion of lifetime and annual first year energy savings, recognizing the importance of the latter for the NYISO in its preparation of annual long term forecasts. Given the importance of the REV, of which the CEF plays a key role, the NYISO recommends the addition of load-related metrics, both lifetime and first-year. The term "load" is meant to be very general, and includes metrics for annual energy, summer peaks, winter peaks, and shifts from high-load hours to low-load hours. The specific metrics can be designed according to the desired outcomes of any particular program or initiative. The NYISO's rationale for inclusion of such a general metric category is that the REV fundamentally seeks to modify the current daily load shape, especially in summer months during high load hours. In keeping with this theme, the NYISO can potentially assist NYSERDA in the construction of

load-related metrics, by virtue of its access to hourly load data in all parts of the state.

Continuing this line of thought, the NYISO recommends that when NYSERDA designs specific programs, initiatives, investments or outcomes, it should indicate the contribution of those programs to the impact on the relevant load-related metrics.

In addition, the NYISO notes that new initiatives will all have costs as well as benefits, and that a focus on net benefits will help ensure that a net positive gain is obtained for any given program element. For example, when (behind the meter) solar PV reaches its peak output in the early afternoon, its societal benefits are at a maximum. Later in the day as solar generation decreases, it must be quickly replaced by other resources in order to match generation supply with demand. Also, at any given time the solar PV generation may be attenuated by clouds and other atmospheric factors, causing a high degree of variability in the power production by this resource. As the scale of solar PV increases statewide with the achievement of the NY Sun Initiative goal, the large-scale impact of this renewable resource must be accounted for in power grid operations. Likewise, to the extent that active demand response reduces loads at one point in time, these loads will often recur at later periods of time. The NYISO proposes that generation intermittency and load shifts should be measured and weighed against the maximum benefits provided by a given technology in order to accurately determine the overall benefit it provides.

III. Conclusion

The NYISO supports NYSERDA's proposed strategies regarding the CEF, and respectfully offers its perspective on the importance of the continued application of comprehensive EM&V protocols as New York's energy programs evolve.

Respectfully submitted,

/s/ Carl F. Patka
Robert E. Fernandez
General Counsel
Carl F. Patka
Assistant General Counsel
New York Independent System Operator, Inc.
10 Krey Boulevard
Rensselaer, New York 12144

August 14, 2015

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Rensselaer, NY this 14th day of August, 2015.

/s/ Joy A. Zimberlin

Joy A. Zimberlin New York Independent System Operator, Inc. 10 Krey Blvd. Rensselaer, NY 12144 (518) 356-6207