STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

Regarding Access to Customer and Aggregated Energy Data and Related Issues in Multiple Proceedings

Cases 14-M-0101, 15-M-0180, 14-M-0224

Natural Resources Defense Council

Urban Green Council

Institute for Market Transformation

Pace Energy and Climate Center

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Comments on

Notice of Technical Conference on Access to Customer and Aggregated Energy Data and Related Issues in Multiple Proceedings

Case Nos. 14-M-0101, 15-M-0180, 14-M-0224

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I. Introduction

The Natural Resources Defense Council (NRDC), Urban Green Council, the Institute for Market Transformation (IMT), and the Pace Energy and Climate Center (Pace) appreciate the opportunity to comment on the issues and questions posed by the Public Service Commission (PSC) in its November 3, 2015 Notice of Technical Conference on Access to Customer and Aggregated Energy Data and Related Issues in Multiple Proceedings (Notice). NRDC is an active participant in these multiple proceedings.

NRDC is an international not-for-profit environmental organization founded and headquartered in New York State. It has more than 1.4 million members and online activists, including more than 110,000 in New York. Since NRDC's founding in 1970, NDRC lawyers, scientists and other environmental specialists have worked to protect the world's and New York State's natural resources, public health, and the environment. NRDC's top institutional priority is curbing emissions that contribute to global warming and building a clean energy future – a priority that can only be realized through the bold leadership of states such as New York. NRDC has extensive experience on building efficiency policies and benchmarking through its more than three decades of work on energy efficiency, as well as work on New York City's Greener, Greater Buildings Plan and through the City Energy Project. NRDC is working in partnership with IMT to bring strong local building efficiency policies, like mandatory benchmarking, retrocommissioning, and efficiency audits, to various cities across the country.

IMT is a Washington, DC-based nonprofit organization promoting energy efficiency, green building, and environmental protection in the United States and abroad. IMT's work addresses market failures that inhibit investment in energy efficiency and sustainability in the building sector.

Urban Green Council is the New York Chapter of the U.S. Green Building Council (USGBC), whose mission is to advance the sustainability of urban buildings through education, advocacy and research. Urban Green Council is a non-profit organization whose experts and a dedicated network of volunteers are helping to transform the built environment in New York City with models that can be replicated in urban centers nationwide, and has been instrumental in the development and implementation of New York City's groundbreaking building efficiency program, the Greener, Greater Buildings Plan, including mandatory benchmarking and disclosure, retrocommissioning and audits.

Pace is a clean energy think tank located at the Pace University School of Law. We conduct research and analysis on legal, regulatory and policy matters because thorough, objective analyses are essential to finding solutions to today's complex energy and climate change challenges. We are lawyers, economists, scientists, and energy analysts, committed to achieving real-world progress. Pace is also an

active participant in REV's multiple proceedings. We have intervened in several utility rate cases, and we have participated in other related, clean energy proceedings before the PSC.

Energy usage data is much more than simply a compilation of numbers. This data is information. Properly assembled, such information creates opportunities for increased knowledge and action. In turn, this knowledge can assist consumers and other key stakeholders in making critical decisions regarding energy usage and supply alternatives, including energy efficiency and other distributed energy resources.

The PSC itself recognizes this fact. In its Order initiating the Reforming the Energy Vision (REV) proceeding,[1] the Commission identified five policy objectives.[2] In enumerating these objectives, the Commission lists first "Enhanced Customer knowledge and the tools that will support effective management of their total energy bill".[3] The foundation for both this knowledge and these tools is timely customer access to high quality usage data. Indeed, access to energy usage data is also critical to the achievement of the Commission's other REV policy objectives. Users of the information extend beyond "customers", such as prospective tenants selecting among different buildings, as well as mortgage lenders or property insurers considering a building's energy usage profile in their decision making.

Through provision of this information, the market participants in the building sector will be better able to adopt the necessary measures to achieve New York's ambitious but achievable State Energy Plan goals on efficiency and greenhouse gas reductions (23% efficiency improvement in buildings and 40% reduction in GHG emissions by 2030). We recommend that the PSC consider the following specific measures:

II. Recommendations Regarding Customer-Level Aggregated ("Whole Building") Energy Usage Data

1. Prioritize the Building Owner Use Case.

The variety of comments made in the Commission's December 16, 2015 Technical Conference regarding Customer and Aggregated Energy Data Provision and Related Issues ("Technical Conference") shows that this subject matter raises many possible "use cases" – scenarios in which certain information sets could be used by customers and other parties, such as service providers. Resolving how utilities might deliver such information in various scenarios also raises many important questions of privacy, systems, and utility resources to address the various possible solutions. We recommend that the Commission focus first on assuring that building owners can obtain usage information they need to measure, benchmark, and manage the energy usage in their buildings.

The Notice references building owners' need to obtain information about the energy use in their buildings, but does not highlight this critical question with sufficient specificity. Building owners need whole-building usage information (at least on a monthly basis) in order to manage the energy use in their buildings, obtain benchmarking results, provide prospective tenants with information about energy use, and more. New York utilities must have clear and express direction to deliver the whole-building usage information to owners, subject to sensible terms and conditions.

[1] Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, "Order Instituting Proceeding", April 25, 2014.
[2] Ibid., p. 2.
[3] Ibid.

The terms and conditions needed for utilities to deliver information to building owners can and should be implemented in a priority manner, separately from regulatory solutions to address other use cases, such as customers sharing information with vendors, and utilities sharing information with other parties. Delivering information to building owners raises discrete questions.

Moreover, the problem is amenable to known solutions already implemented by many utilities in other states, and we describe such policies below.

2. Direct Utilities to Deliver Aggregated "Whole-Building" Usage Data to Building Owners.

The PSC should direct New York utilities to deliver whole-building usage summary information to building owners if the building includes two or more meters and if additional conditions are satisfied (such as providing notices to included customers).

It is necessary to first define aggregated building usage information (ABUI) or "whole building" usage information. Many buildings have multiple separately metered customers, such as office buildings with many tenants or apartment buildings with tenants with their own utility accounts. In these buildings, the owner requires a summation of all the utility usage across all meters in order to know how much usage occurs in a given time. The total utility usage is the basis for a benchmarking score and provides a baseline to identify anomalies that can cause usage spikes. (ABUI is a single number, such as 105,000 kWh in June 2015.)

Any policy to deliver summary information must be tailored to resolve any privacy risks and considerations of the included customers (e.g., tenants in the buildings). ABUI is not customer information and contains no individual customer information. If the ABUI total (e.g., 105,000 kWh) is aggregated usage from several customer meters, it is very difficult for the owner to use the information to "re-identify" the usage of any included customer. For a discussion of specific reasonable terms and conditions that the PSC might consider, see "How Utilities Can Give Building Owners the Information Needed for Energy Efficiency while Protecting Customer Privacy," *Electricity Journal*, November 2015 (attached as appendix A).

To help facilitate compliance with New York City's annual benchmarking requirement for large buildings, we understand that Con Edison, National Grid, and PSEG Long Island have been delivering whole-building usage information to building owners using reasonable terms and conditions.[4] These policies, however, should be institutionalized, expanded to include automatic uploading of the data (see Section 3, below), and these data should be available to all building owners around the state. While Con Edison, National Grid and PSEG Long Island are currently providing building owners with whole-building usage information, they are not yet providing automatic upload/web services, which is needed. Market participants will be better able to establish tools and uses for such information with greater certainty around the information availability.

[4] http://www.coned.com/energyefficiency/city_benchmarking.asp#<http://www.coned.com/energyefficiency/city_benchmarking.asp; http://www.nyc.gov/html/gbee/downloads/pdf/national_grid_ll84_data_request.pdf; http://www.nyc.gov/html/gbee/downloads/pdf/PSEG_LL84_Process_for_Data_Retrieval.pdf. Note that the March 26, 2010 "Order Establishing Three-Year Electric Rate Plan" for Con Edison adopted the terms set forth in a Joint Proposal filed in the rate proceeding on November 24, 2009 by Con Edison and DPS Staff, which provides for the manner in which Con Edison provides aggregated building energy usage to building owners and managers.

3. Direct Utilities to Implement Systems to Enable Direct and Automatic Upload of Aggregated Building Usage Information.

The PSC should direct utilities to implement systems to enable direct and automatic upload of whole-building usage information in the formats needed for use in standard benchmarking systems, including EPA's Energy Star Portfolio Manager.[5] At a minimum, utilities should implement such systems for customers and buildings located where mandatory benchmarking requirements are in place.

Building energy benchmarking increases adoption of efficiency investments and spurs the efficiency market. [6] Implementing systems that allow for automatic data delivery to systems such as Portfolio Manager would drastically reduce data entry errors inherent in manual data entry and facilitate owners' building energy benchmarking, which is a crucial, foundational step for building owners to make informed decisions about investing in energy efficiency measures in their buildings, and in certain localities, required by law. Automatic uploading reduces the burden of benchmarking on building owners and would greatly facilitate benchmarking throughout the state. Benchmarking energy use allows building owners to measure a building's comparative energy performance over time and allows owners to compare their buildings to others of a similar size and type in their location and across the country. It provides owners with an energy performance baseline, helps them to target their efficiency investments, and allows them to verify savings.

Many utilities around the country provide aggregated building energy use information to building owners, including (among others): Avista (Washington), Baltimore Gas & Electric (Maryland), Commonwealth Edison (Illinois), Enwave Seattle (Washington), Eversource (Massachusetts), PECO (Pennsylvania), Pepco (District of Columbia), Puget Sound Energy (Washington), Rocky Mountain Power (Utah), Seattle City Light (Washington), and Washington Gas (District of Columbia). Providing clear direction to do so in New York State would bring New York utilities in line with those utilities.[7] In October 2015, the California legislature passed AB 802 requiring, in part, owners to report benchmarking results for all commercial and residential buildings with more than five units to a statewide repository, and requiring utilities to deliver the requisite information to owners.[8] The National Association of State Energy Officials also recently passed a

[5] See "Web Services" functions that enable utilities to automatically deliver usage information into customer-specific accounts in Energy Star Portfolio Manager and other systems: http://portfoliomanager.energystar.gov/webservices/home;jsessionid=322D9AE568DC072B3A5618348F850D30.beta-esws-dist-2.

[6] There are many resources demonstrating how utility delivery of whole building data facilitates the adoption of efficiency measures. The Data Access and Transparency Alliance, organized by IMT, the Building Owners and Managers Association (BOMA) International, the Real Estate Roundtable, the U.S. Green Building Council, NRDC and Enterprise Community Partners, works to improve access to building energy data to support benchmarking across the country and has published a *Utilities' Guide to Data Access* (available at http://www.imt.org/news/the-current/new-utilities-guide-to-data-access). In addition, the State and Local Energy Efficiency Action Network has *A Utility Regulator's Guide to Data Access for Commercial Building Energy Performance Benchmarking* (available at https://www4.eere.energy.gov/seeaction/publication/utility-regulators-guide-data-access-commercial-building-energy-performance-benchmarking). The Electricity Journal also just published "How Utilities Can Give Building Owners the Information Needed for Energy Efficiency while Protecting Customer Privacy" (available at http://www.sciencedirect.com/science/article/pii/S1040619015002018) and attached as Appendix A.
Resources addressing the benefit to utilities from benchmarking programs include Creating Value from Benchmarking: A Utility Perspective (available at http://www.imt.org/uploads/resources/files/Creating_Value_From_Benchmarking_IMT.pdf) and the Consortium for Building Energy Innovation's discussion regarding targeting utility efficiency programs using benchmarking data (http://cbei.psu.edu/testing-new-utility-driven-retrofit-programs/). DOE's Energy Data Accelerator has many additional resources, as well (https://www1.eere.energy.gov/buildings/betterbuildings/accelerators/energy.html).

[7] http://database.aceee.org/city/energy-data-access.

[8] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB802.

resolution supporting state adoption of policies facilitating whole building energy data access, transparency and benchmarking. Mandatory benchmarking programs are now underway in a growing number of cities and states across the country, with more to come.[9]

Creating a requirement for utilities to automatically upload usage information to systems such as EPA's Energy Star Portfolio Manager will further enable benchmarking initiatives and requirements throughout New York by improving the quality of data and reducing the cost of obtaining such data, especially in terms of time, for building owners. Expanding benchmarking will increase the opportunities for utilities and market participants to increase efficiency efforts and will help achieve the state's climate and energy goals.

4. Direct Utilities to Examine Policies and Processes for Building Owners to Obtain Individual Tenant Usage Information.

The PSC should direct utilities to examine policies and processes for building owners to obtain individual usage information of tenants with the tenant's permission. The express goal of this directive is to encourage utilities to modernize their policies and procedures so that building owners, tenants, and the utilities can accomplish the needed information exchange with reduced paperwork burdens, time delays, and costs.

In many apartment buildings, energy usage information at the unit-level is necessary for the owner to consider energy related repairs and improvements. In subsidized housing, the unit-level information allows for accurate calibration of utility allowances to enable an owner to recoup the cost of efficiency-related work.[10]

It is reasonable and expected that utilities would require customer permission to share the individual customer's usage information with the building owner. However, many utilities have antiquated policies in place that require building owners to obtain permission using a utility-provided paper form and to obtain a "wet-signature" and then send or fax the form to the utility for every tenant in the building. Even with automated functions (such as "Green Button Connect My Data"[11]), the approval may hinge on each tenant/customer taking action. This process can be, in practice, a barrier to the owner obtaining the needed customer information, which could result in lost efficiency opportunities.

We recommend that the PSC direct utilities to implement policies and procedures that will enable building owners to obtain usage information in a more streamlined manner. One option to explore is to allow utilities to rely upon tenants conveying requisite permission in a lease document. Another option is to authorize the utility to "pre-qualify" owners or operators for large numbers of offices or apartments, which would allow the utility to rely on the building owner's representation and warranty that it has obtained the tenant's permission, assuming the owner has met certain preconditions. This will relieve the utility of the burden of examining every lease document for the requisite language and signatures.

[9] http://www.imt.org/uploads/resources/files/IMT_USbenchmarking_11012015.jpg.

[10] See Open Letter to Utilities from Secretary of U.S. Dept. of Housing and Urban Development, November 14, 2013 (located at: http://portal.hud.gov/hudportal/documents/huddoc?id=SecOpenLtrUtil11-20-14.pdf).

[11] http://www.greenbuttonconnect.com/

III. Recommendations Regarding Community-Level Energy Data

1. Require the Development of a System that Easily Provides Access to Aggregated, Community-Level Data.

We recommend that the Commission act to assure the development of a data system that allows a geographic rollup of individual customer data with appropriate privacy protections. Access to aggregated, community level data by local jurisdictions is critical to the success of REV. Moreover, such data is equally important in facilitating other important state initiatives, such as the New York State Community Partnership and the Five Cities Energy Plans.

In its presentation at the Technical Conference, NYSERDA described these aggregated, community-based data as "exploratory data" to distinguish it from more customer specific "implementation data". We concur with NYSERDA's recommendation that this aggregated, community-based data should be made available at no cost to communities and the public through a single, easily accessible portal. NYSERDA correctly points out that access to such data is in the public interest. This aggregated data should minimally be available annually. Ideally, in time it can be produced on a quarterly or even monthly basis.

Working with the utilities and organizations like NYSERDA and NYPA, the Commission should facilitate the development of a standard reporting form and assure the quality and consistency of these data to allow for easy geographic comparisons between different utility territories. The availability of such community-based aggregated data will be a valuable tool for the Commission, NYSERDA, and interested stakeholders to track and measure progress under both the Clean Energy Fund and the utilities' energy efficiency programs, especially market transformation efforts, and to facilitate program adjustments and target future assistance.

IV. Conclusion

We applaud the Commission for its recognition of the central role that access to customer data must play in realizing REV's vision. Such access is equally critical to other state and local government initiatives designed to achieve deeper energy efficiency savings and wider deployment of distributed energy resources. We respectfully recommend that the Commission adopt the specific individual and community-based aggregation policies that we suggest in our comments. We stand ready and willing to work with the Commission and other stakeholders to implement these policies in a way that can benefit both utilities and consumers.

Respectfully Submitted,

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