

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

Proceeding on Motion of the Commission in regard
to Reforming the Energy Vision

Case 14-M-0101



**COMMENTS OF MISSION:DATA ON
DPS STAFF STRAW PROPOSAL ON TRACK ONE ISSUES**

1. INTRODUCTION

We are pleased to provide these comments on the “Developing The REV Market In New York: DPS Staff Straw Proposal On Track One Issues.” Mission:data, a national coalition of technology companies offering effective, scalable building energy management technologies, has consistently applauded the objectives of the REV initiative. Mission:data includes within its membership companies that are actively developing products and services to help consumers save money and energy and participate more fully in energy markets. Several of our companies are based in New York State. Ensuring that data access policies are given full consideration will help drive a robust market for energy management services within New York and position this state for economic leadership in this sector.

We continue to believe that by encompassing as one of its principal goals to “improve system efficiency, empower customer choice and encourage greater penetration of clean generation and efficiency technologies,” the Commission’s REV proceeding positions New York to both save consumers energy and money and lead the development of a vibrant, innovative market in energy management. Mission:data believes achievement of these important goals depends upon a critical step: empowering consumers with convenient access to their energy data with the ability to share that data with third parties of their choice.

2. COMMENTS

A. Data access policies should be affirmed in Track One Policy Decision

Mission:data is pleased that the Straw Proposal recognizes the central importance of providing customers with convenient access to their own data. Specifically, we agree with the primary conclusion reached in the Straw Proposal on this topic:

Customers should have ready access to their own energy usage data in a secure and standard format. In addition, customers should be able to authorize that their energy usage data be provided to non-utility entities such as DER providers, to enable providers to develop and offer products and services that are tailored to the customer's specific energy patterns and needs. (Straw Proposal, p. 26)

We believe this conclusion is supported by the conclusions reached by the Customer Engagement Committee that customers in New York lack data that is essential to their participation in managing their energy use and that being able to share that data with third party service providers of their choice will unlock the potential for greater energy savings. As mentioned by DPS Staff, New Yorkers are likely to better manage their energy use when provided with the information and opportunity to do so.

As we've noted in previous comments, the research literature shows that providing consumers access to their energy usage information can drive significant savings in energy usage and demand response. Improving data access policies will increase the ability of New York to achieve significant improvements in energy efficiency, both through regulated programs and offerings from the private sector that are outside of traditional programs.

We believe the Track One Policy Decision should affirm these fundamental consumer rights.

B. Data access procedures should be established that are consistent with best practices

As we have noted, the Straw Proposal reaches an appropriate conclusion that consumers must have access to their own energy usage information and that they have the ability to share this information with

service providers of their choosing. However, the Straw Proposal does not describe the mechanisms by which they expect utilities or the DSP to provide this information or establish a timeline for ensuring that these objectives are promptly achieved. We recognize that the Straw Proposal also includes discussion of a Data Exchange, which may be a platform available to individual consumers themselves.

Utilities across the country have implemented systems that effectively, securely and affordably provide consumers with access to their own energy data according to common standards. We believe that, at a minimum, any Track I Policy Decision should include directives that the utilities (or DSP) include within their Energy Efficiency Transition Implementation Plans (ETIP) and Distributed System Implementation Plans (DSIP) specific components that describe how customer data will be made available to both consumers and their chosen service providers. These directives should establish a clear timeline for enabling consumers to access their own energy data through the Green Button Connect protocol for both consumers and authorized third parties no later than December 31, 2015. In states where no clear timeframe have been established, consumer access has been delayed or, more commonly, is not available. Where advanced metering infrastructure is deployed that infrastructure must support consumer devices achieving interoperability through adopted national standards for the purpose of enabling consumers to purchase home energy management devices in New York and ensure that they can use them regardless of the service territory in which they live. Prompt enablement of the home area networking capabilities (most commonly through Zigbee radio capability embedded in this meter) should be required so that consumers desiring to realize the larger energy savings enabled by real-time data can easily do so.

We would further note that there are existing standards and best practices in implementation throughout the country. At a minimum, we believe that New York customers should be provided promptly with data access procedures that are consistent with the Green Button and Green Button Connect protocols. Finally, while we agree with discussion included in the Straw Proposal to the extent that there are new tools available to consumers and value in developing a “consumer-friendly web-based

application and a mobile application,” we would stress that we do not believe that data access should be designed around or limited to a specific application, web page or mobile application. Consistent with the Green Button Connect format, these data are made available through an application programming interface (API), which then allows innovation by service providers and consumers.

We believe that the Track I Policy Decision should affirm the objective to make data available through mechanisms that are scalable, consistent with nationally recognized standards and best practices that support further innovation and market animation. Further, these policies should anticipate the deployment of future technologies, including advanced metering capabilities.

C. Data access policies should include billing-quality usage, tariff and charges information

The Straw Proposal includes no discussion of the need for better charges, tariff and price information. Usage, tariff and invoice data are necessary for accurate Measurement and Verification (M&V) of energy efficiency, accurate savings projections for proposed improvements and cost-effectiveness evaluation of retrofits. These data are critical for enabling customers to get information about not just energy usage, but its impact on bills and opportunities to save both energy and money.

We are pleased that Commission Staff highlighted the value of customers being able to access their own energy usage data in section III.B(1)(ii). However, we feel it is important to specify the types of data to which customers should have access. In general, any usage information collected by the meter, in addition to pricing information, should be available. For residential customers, this means usage data at the highest level of granularity possible (i.e. hourly or fifteen minute usage, and real-time usage directly from the meter to the consumer where Advanced Metering Infrastructure is used and where home area networking capability is possible). For commercial and industrial customers, whose bills may contain a charge for power factor, all billing determinants such as real and apparent power values should be available. As for pricing information, customers of all classes ought to be able to easily access the costs associated with each usage interval, inclusive of all fixed and volumetric charges. The availability of

accurate pricing information is critical to DERs in order to deliver compelling services that accurately convey to consumers the financial impact of their energy use and decisions.

The lack of access to quality machine-readable data that reflect actual charges from utility bills is a current barrier to energy service providers. It is possible to combine usage and tariff data to model energy expenditure, however measurement of actual cost is only possible with actual charges data from utility bills (invoices). We believe the Straw Proposal should explicitly address the need for access to machine readable billing data.

The straw proposal mentions the utility bill as a customer engagement tool, and states that the “content and format” of utility bills should be explored by Staff as part of Case 12-M-0476 (p.29). In addition to an exploration of the content and format of paper bills and bill images as it relates to communications from DSP and ESCO companies, both the Track 1 Straw Proposal and the collaborative Staff effort for Case 12-M-0476 should make the development of strategies towards secure and modern electronic flows of utility billing data a top priority. Any investigation around data access should be based on rigorous technical due diligence. Technical support from an “independent research organization such as a United States Department of Energy sponsored national laboratory” as proposed in section IV.A(3).iii.iv is therefore a priority that we support strongly.

For 30 years or more, utility providers have been using “Electronic Data Interchange” (EDI) for sending electronic invoices and billing data. EDI is used for transactions with retail suppliers and large end users such as government entities and large companies. However, we have concerns regarding the scalability of EDI as data formats and transmission and authorization protocols vary by utility provider. While EDI has served its purpose historically, it will not support the vision of market animation proposed within REV. The lack of a standard and open exchange of utility billing data is an immediate barrier to accomplishing both long- and short-term objectives.

In the immediate term, EDI is mentioned in section III.B(2) of the Straw Proposal in terms of enhancing consolidated utility billing by giving ESCOs 1000 characters of space for messaging on utility bills. This exploration should be expanded to include not just the current communications between the DSP and ESCO and Consolidated Utility/ESCO Billing, but also how the billing data currently exchanged in EDI can be made available to customers and authorized third parties in a standardized machine readable format using open source protocols.

In addition to the types of available data, it will be important for the Commission to dictate its quality as well. Our experience in other states is that wholesale markets typically require meter data of a very high quality to ensure that generation or demand reductions are accurately accounted for, but often utilities are not immediately forthcoming with high quality data, providing only “raw” meter readings. This is because, prior to generating bills, raw meter data are typically sent through validating, editing and estimation (VEE) processes, yielding what is often referred to as “revenue quality meter data” (RQMD). The VEE process might happen daily, monthly, or on some other interval, depending on the utility and Commission regulations. If RQMD is needed by NYISO or the DSP to accurately verify usage, but the utility does not provide RQMD in a timely manner, then the result is a un-level playing field in which only existing utilities can effectively participate in providing distributed resources. Various solutions to this challenge exist, and thus we strongly encourage the Commission to require utilities to provide cost and usage data to customers at a level of quality that is adequate for meeting the wide array of market functions such as financial settlements for demand response or distributed generation.

The Track I Policy Decision should affirm the right of consumers to have access to billing-quality price information in addition to usage data. Implementation plans should include discussion of how this information will be made available to consumers and their authorized service providers.

D. Data access policies should include access to on-premise and real-time usage information

The Straw Proposal includes no discussion of access to real-time information and information available on-premise. Nearly all advanced metering available in the market today include some form of home area networking (HAN) capability, designed to allow consumers to see meter information in real-time. This is a critical component of any energy management strategy and demand management applications. Further, this information can be used to verify that certain actions (such as load reduction) have indeed taken place. While we recognize that the availability of this information will vary based on technology deployed in the field, we believe that consumers should be afforded every opportunity to access and leverage information about their energy use. This includes real-time information and is particularly important with the reasonable expectation that advanced technologies will be deployed by utilities and the DSP in the years ahead.

The Track I Policy Decision should affirm the right of consumers to have access to real-time information that is available at the customer premise from existing or future technologies and metering systems.

E. Advanced metering capabilities are fundamental to innovation and market animation

The Straw Proposal includes very limited discussion of advanced metering capabilities. We believe that there are several capabilities that are fundamental to the goals and objectives of REV. Specifically, the ability to have a more detailed historical record of energy usage can yield tremendous energy efficiency benefits. Similarly, real-time information is critical to demand management and verification applications.

We recognize that previous Commission deliberations have included wide-ranging opinions on the costs and benefits of various implementations. We also recognize that the specific implementation strategies will (and should) vary from service territory and within service territories. However, to the

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