



Mary Krayeske
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August 24, 2020

Hon. Michelle L. Phillips
Secretary
New York State Public
Service Commission
Three Empire State Plaza
Albany, NY 12223

**Re: Case 20-M-0082 – Proceeding on Motion of the Commission
Regarding the Strategic Use of Energy Related Data**

Dear Secretary Phillips:

Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. (Con Edison), National Fuel Gas Distribution Corporation, New York State Electric & Gas Corporation, KeySpan Gas East Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc. (O&R), and Rochester Gas and Electric Corporation (Joint Utilities) have attached for filing the Joint Utilities' Comments on the Department of Public Service Staff's Whitepapers Regarding a Data Access Framework and Implementing an Integrated Energy Data Resource in the referenced proceeding.

If you have any questions, please contact me. Thanks in advance for your assistance.

Sincerely,

Mary Krayeske

Attachment

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

Proceeding on Motion of the	}	
Commission Regarding	}	Case 20-M-0082
Strategic Use of Energy Related	}	
Data	}	

**JOINT UTILITIES' COMMENTS ON THE DEPARTMENT OF PUBLIC SERVICE
STAFF'S WHITEPAPERS REGARDING A DATA ACCESS FRAMEWORK AND
IMPLEMENTING AN INTEGRATED ENERGY DATA RESOURCE**

I. Introduction and Summary of Recommendations

On March 19, 2020, the New York Public Service Commission (Commission) initiated a proceeding to consider the strategic use of energy related data.¹ Department of Public Service Staff (Staff) subsequently issued two whitepapers. The Data Access Framework (Framework) Whitepaper proposes a mechanism to facilitate data sharing that respects customer privacy and cybersecurity.² The Integrated Energy Data Resource (IEDR) Whitepaper proposes a statewide data platform that would hold diverse types of customer and system data and provide analytic tools. On June 30, 2020, the Commission issued a *Notice of Stakeholder Meeting and Soliciting*

¹ Case 20-M-0082, *Proceeding on Motion of the Commission Regarding Strategic Use of Energy Related Data* (Data Access Proceeding), Order Instituting Proceeding (issued March 19, 2020).

² Data Access Proceeding, Department of Public Service Staff Whitepaper Regarding a Data Access Framework (filed May 29, 2020) (Framework Whitepaper) and Data Access Proceeding, Department of Public Service Staff Whitepaper Recommendation to Implement an Integrated Energy Data Resource (filed May 29, 2020) (IEDR Whitepaper) (collectively, Staff Whitepapers).

Comments (Notice) on the two whitepapers.³ The Joint Utilities⁴ submit these comments on each Whitepaper and the specific questions posed in the Notice.

The Staff Whitepapers represent an ambitious effort to change and standardize requirements for sharing customer and system data under a unified access and risk Framework and also recommend developing a substantial, potentially costly new IEDR platform that raises privacy and security concerns.⁵ As an overall recommendation, the Joint Utilities note that the Commission should require a process to refine the governance mechanisms that apply to both the Framework and the IEDR, and the Joint Utilities should have key roles in that governance. The Joint Utilities have developed considerable expertise sharing system and customer data⁶ in collaboration with stakeholders and possess decades of experience in information system design, data management, market facilitation, data access controls and customer consent.⁷ Stakeholders

³ Data Access Proceeding, Notice of Stakeholder Meeting and Soliciting Comments (issued June 30, 2020) (Notice). Initial comments are due August 24, 2020 and reply comments are due September 11, 2020.

⁴ The Joint Utilities are Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. (Con Edison), National Fuel Gas Distribution Corporation, New York State Electric & Gas Corporation, KeySpan Gas East Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc. (O&R), and Rochester Gas and Electric Corporation.

⁵ The Commission has addressed privacy and security concerns in several proceedings in recent years and the Joint Utilities have made considerable progress in protecting the privacy and security of customer and system data shared with third parties. *See, e.g.*, Cases 07-M-0548 *et al.*, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio* (EEPS Proceeding), Order on Rehearing Granting Petition for Rehearing (issued December 3, 2010) (OPower Order); Cases 14-M-0094 *et al.*, *Proceeding on Motion of the Commission to Consider a Clean Energy Fund* (CEF Proceeding), Order Regarding New York State Energy Research and Development Authority Data Access and Legacy Reporting (issued January 17, 2019); Cases 18-M-0376 *et al.*, *Proceeding on Motion of the Commission Regarding Cyber Security Protocols and Protections in the Energy Market Place* (Cybersecurity Proceeding), Order Establishing Minimum Cybersecurity and Privacy Protections and Making Other Findings (issued October 17, 2019).

⁶ *See* Data Access Proceeding, IEDR Whitepaper, App. A, for an inventory of the Joint Utilities' online systems of publicly accessible information sources.

⁷ *E.g.*, individually or collectively, the Joint Utilities have led the development and maintenance of: Electronic Data Interchange (EDI) protocols and other third-party resources to enable retail access markets; advanced metering infrastructure (AMI) design and implementation; customer service system replacements; expanded Hosting Capacity maps (*e.g.*, REST URL provision to accommodate utility data display on third-party websites); Energy Management System (EMS) and Geographic Information System (GIS) enhancements; consent-based data sharing paradigms such as Green Button Connect (GBC); and, most recently, the Pilot Integrated Energy Data Resource developed in a collaborative effort between Staff, NYSERDA, O&R, and a

will benefit from this expertise by having the Joint Utilities serve on the IEDR Steering Committee and other governance structures.⁸

The Joint Utilities provide comments to the Framework Whitepaper in Section II, below. The Joint Utilities recommend that, prior to adopting the Framework, the Commission direct Staff to host a series of technical conferences or collaboratives to refine the proposals in the Framework and, in particular, to inform the development of a data access security matrix with defined, standardized access roles.⁹ Collaboration among Staff, the Joint Utilities, and other stakeholders should establish a data sharing governance structure specifying the roles, responsibilities, and risk management protocols— including the assignment of liability— that should apply to all entities with access to customer and/or system data. After this collaborative work is complete, Staff should provide a detailed matrix describing data access roles and associated security access to the Commission for approval. This collaboration is also necessary to determine how, or if, existing data sharing mechanisms and requirements will be impacted by the Framework.

The Joint Utilities make recommendations related to the IEDR Whitepaper in Section III. To be clear, Staff’s proposal for a statewide data platform is extensive in scope and will necessarily require several years and significant resources to implement, notwithstanding existing and planned utility investments in data access and sharing. As an initial step, the Joint Utilities recommend that the Commission direct Staff to work with stakeholders to conduct a thorough scoping phase before continuing further efforts down the path of IEDR development.

third-party vendor. The Joint Utilities have also negotiated and executed Data Security Agreements with energy services and governmental entities in the Cybersecurity Proceeding.

⁸ Data Access Proceeding, IEDR Whitepaper, p. 27.

⁹ The Framework Whitepaper discusses the concept of this matrix in several places but does not define it in detail. See, *e.g.*, Data Access Proceeding, Framework Whitepaper, pp. 2, 3, 21-24.

This should include an evaluation of whether focusing on data standardization, as opposed to a statewide centralized platform, is most appropriate at this time. In addition, this would include an assessment of preliminary use cases, and their associated data requirements and costs, which could inform a staged implementation approach. Implementation – including enabling investments and data sharing methods – can then be prioritized based on value and cost of each use case. A flexible development plan, which evolves as stakeholder, utility, and customer input is received, will facilitate development of an IEDR that is cost-effective and responsive to market needs. Since any statewide platform system capable of “[u]nleashing the power of energy data”¹⁰ fundamentally relies on the data collection and management systems at each utility, the Joint Utilities recommend that platform development be undertaken in a manner that ensures alignment among its design and existing utility capital plans, already built systems and ongoing investments to reduce overall costs. The Joint Utilities urge the Commission to build upon the lessons learned from the Pilot Integrated Energy Data Resource¹¹ (Pilot IEDR) where Staff and the New York State Energy Research and Development Authority (NYSERDA) partnered with O&R. Finally, the scoping phase should also assess the organizations or entities best positioned to play the role of Project Sponsor.

Pragmatic and iterative approaches to developing the Framework and the IEDR offer the best chance for achieving the Commission’s objectives. The Joint Utilities look forward to engaging with the Commission, Staff, and other stakeholders to develop an effective Framework and a practical, cost-effective IEDR.

¹⁰ Data Access Proceeding, IEDR Whitepaper, p. 1.

¹¹ Established in the Storage Proceeding Case 18-E-0130, *In the Matter of Energy Storage Deployment Program* (“Storage Proceeding”), Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018) (“Storage Order”). Notice Announcing the Pilot Integrated Energy Data Resource (issued January 14, 2020).

II. The Joint Utilities' Comments on the Framework Whitepaper

The Joint Utilities support development of a Framework that provides consistent guidance on energy-related data access rules and roles. Staff indicates that the Framework “would serve as a single source for data access policies and provides uniform and consistent guidance on what is needed for access to, and the availability of, energy-related data.”¹² The Joint Utilities agree with that goal and recommend a stakeholder process to define a standardized set of data access roles¹³ and a matrix that defines the cybersecurity and privacy terms.

With regard to the security matrix that is at the core of the Framework, the Joint Utilities recommend a series of interim steps to develop a clear process to establish a comprehensive matrix, including designation of key roles and rules. The matrix development process as described in the Framework Whitepaper is unclear as to responsible parties, process steps, and key milestones. The matrix is a crucial step to ensuring data security. It must specify the cybersecurity and privacy requirements that apply to the availability of specific types of data. As such, the Joint Utilities recommend a series of technical conferences or other collaboratives with stakeholders to clarify responsibilities, processes, and milestones. Following that process, Staff should publish a draft matrix for comment and subsequent Commission approval.

At this time, Staff recommendations for Joint Utilities implementation plans and compliance filings to produce a common Framework are premature. The Joint Utilities recommend that the stakeholder group define a limited number of data access roles. Each access

¹² Data Access Proceeding, Framework Whitepaper, p. 2.

¹³ The Access Role is determined through the proposed Data Ready Certification process and details the exact data sets and transmittal/access methods through which the Energy Service Entity (ESE) is approved to access energy-related data. Data Access Proceeding, Framework Whitepaper, App. A, p. 1.

role should have access to a standard set of data elements. Such standardization is crucial to operationalizing the Framework and providing clear, consistent treatment. After approval of standardized data access roles and a Framework is memorialized with a consistent matrix, it should turn its attention to implementation. Only then should Staff, in conjunction with NYSERDA, lead the procurement for a Provider of the Data Ready Certification program.

With respect to types of data, the Framework Whitepaper defines three categories of data (*i.e.*, highly confidential/sensitive not to be shared, other types of data to be shared with consent, and anonymized data). This categorization appears to be aimed at customer data. The Joint Utilities suggest this approach be reconsidered by the stakeholder group. The Joint Utilities also recommend that the stakeholder group develop a set of classifications to apply to system data.

Staff, the Joint Utilities, and other stakeholders should work collaboratively through a stakeholder engagement process to address, at a minimum, the following issues described at a high-level in the Framework:

- Section 2.1 of the Framework Whitepaper summarizes a variety of existing data sharing mechanisms. Stakeholder experience with each of these initiatives has yielded best practices that can inform and enhance the design and implementation of future data sharing mechanisms.
- Section 2.2 of the Framework Whitepaper states that Appendix E of each electric utility's Distributed System Implementation Plan filing,¹⁴ which is intended to address cybersecurity issues, is a risk-based model but that "Staff believes that the requirements, as applied, do not adequately address the actual risk associated with various types of data

¹⁴ DSIP Proceeding.

access or the customer's choice regarding data sharing.”¹⁵ The Joint Utilities note, however, that Staff's proposed solution does not directly address these perceived deficiencies. Further discussion among stakeholders is necessary to develop the appropriate risk-based model.

- Section 4.4 of the Framework Whitepaper describes ESE certification. The Joint Utilities recommend further stakeholder discussions so that there is no ambiguity among the ESEs about the applicability of the Framework. The Framework Whitepaper also ties cybersecurity to transmittal or access mechanisms only and privacy requirements only to type of data. The Joint Utilities note that cybersecurity and privacy requirements cannot be separated so simply, and strongly suggest a separate workstream or dedicated technical conference to assess these issues.
- In Section 6, the Framework Whitepaper mentions development of a cybersecurity and privacy matrix, which is a considerable undertaking on which the Framework depends. As discussed at more length above, the Joint Utilities strongly suggest stakeholders be involved in the determination of underlying data required to complete the matrix. In particular, the Joint Utilities suggest a collaborative effort involving, at a minimum, Staff and the Joint Utilities to develop the matrix that should be subject to Commission approval.

More detailed discussions of elements within the Framework Whitepaper may clarify certain issues that require additional elaboration. In particular:

¹⁵ Data Access Proceeding, Framework Whitepaper, p. 14.

- The ESE risk management process discussed in Section 3 requires refinement and development, particularly concerning the parties that will be responsible for implementing the process, and how these processes will be updated. The Framework Whitepaper anticipates that the data custodian “would be able to easily confirm the data to which each ESE has been certified for access” but clarity is required concerning how ESEs will update certification (or risk decertification).¹⁶ Moreover, liability and insurance within ESE risk management is not adequately described. For example, will the Provider of ESE verification services assume liability for data security and breaches? The assignment of risk to various entities is a key Framework design element, especially if utilities are required to transmit data to a platform they do not control. Knowing the rules of the road will be essential for the development and delivery of customer benefits.
- The Data Access Framework Application Guide,¹⁷ including who will write it and how it will be updated, is not adequately described in the Framework Whitepaper. In particular, this applies to data quality and integrity standards and the type of penalties that would be imposed for infractions.¹⁸
- The Joint Utilities recommend that Staff strengthen enforcement mechanisms described at a high-level in Section 4.3. In its current format, the only remedy for enforcement is for ESEs to lose data access. The Joint Utilities agree that this is an important provision and would encourage that additional enforcement steps building on that foundation.

¹⁶ Data Access Proceeding, Framework Whitepaper, p. 16.

¹⁷ Data Access Proceeding, Framework Whitepaper, p. 3.

¹⁸ Data Access Proceeding, Framework Whitepaper, p. 20.

- Section 4.4.2 states that there should be no protections applied to system data unless the data impacts privacy or critical infrastructure as it is “aggregated data itself.”¹⁹ The Framework Whitepaper specifically suggests that Hosting Capacity Map users should not be required to register with the utility prior to access.²⁰ However, no-fee registration requiring an email address should be continued because it allows for (1) relevant communication of operational information²¹ between utilities and users; (2) transparency into the number of users and the manner of use that can inform system improvements; and (3) perhaps most importantly, gives the utility a means to shut off bad actors. Therefore, this aspect of the Framework must be modified, and users should continue to be required to register with an email address. This small, simple registration is critical.
- Finally, clear and consistent processes must be defined for updating the Framework, the associated access roles, and elements within the risk matrix. The Whitepaper is not clear how this will be handled and states in Section 3 simply that “[u]nder the proposed Data Access Framework any changes going forward would be applied uniformly to all markets and ESEs, at the time of the change, eliminating these types of problems.”²² The Continuous Improvement process described in Section 4.8 provides limited additional detail on the revision process and is not specific to revisions related to access roles and the security risk matrix.

¹⁹ Data Access Proceeding, Framework Whitepaper, p. 31.

²⁰ Data Access Proceeding, Framework Whitepaper, p. 31.

²¹ E.g., system updates, enhanced data availability, etc.

²² Data Access Proceeding, Framework Whitepaper, p. 19.

III. The Joint Utilities' Comments on the IEDR Whitepaper

The Joint Utilities agree with Staff that, properly developed, a standardized platform has the potential to facilitate investment and community planning that will accelerate the deployment of clean energy solutions throughout New York State. However, from a technical perspective, Staff's proposed scope²³ for the IEDR is ambitious and will take many years to be fully realized. Developing the IEDR in a timely and cost-effective manner that will meaningfully contribute to achievement of the State's clean energy goals will require an iterative approach that leverages existing resources and prioritizes features and data access opportunities that yield the greatest benefits to customers, distributed energy resources (DER), and State and local governments. As mentioned earlier, the Joint Utilities recommend that the Commission direct Staff to work with stakeholders develop a comprehensive scoping phase before continuing further efforts down the path of IEDR development.

In the form proposed in the IEDR Whitepaper, the vast majority of the data contained within the IEDR platform will be sourced from New York State's distribution utilities. The Joint Utilities have unmatched expertise concerning the information systems they use, the nature, limitations, and evolution of the data available in these systems, and the operational challenges that must be overcome to make the data flow effectively to any given platform and to end-users. The Joint Utilities can provide insights into how the proposed IEDR platform may align with existing and planned information systems used for system planning, distribution operations, and

²³ "The proposed IEDR is a sophisticated information system capable of: automatically and securely acquiring a large volume and wide variety of information from many sources; normalizing, managing and securing large amounts of diverse data; analyzing the acquired information to generate other useful information; applying advanced information controls to manage users' access to functions and data; timely performing extensive, user-defined data analyses; timely and securely exporting data to users and other systems; and, efficiently supporting rigorous system administration, security, and operating processes." Data Access Proceeding, IEDR Whitepaper, p. 23.

customer services. This expertise has been forged over decades of service as utility providers, but also from experience developing other data sharing capabilities, working with market participants, service providers and system integrators, and developing and guiding the State's Pilot IEDR. As such, the Joint Utilities must play a meaningful role in the IEDR effort, applying expertise and lessons learned to the purposes described in the IEDR Whitepaper through participation in the IEDR Steering Committee and other stakeholder engagements.

The Joint Utilities urge the Commission to direct further refinement of the IEDR concept through collaboration among key stakeholders including Staff, the Joint Utilities, and NYSERDA. These stakeholders should determine the best approach to build a platform based on practical and cost-effective use cases. In support of these purposes, the Joint Utilities make the following recommendations to optimize technical efficiency, data availability and cost-effectiveness while also creating value for customers and stakeholders on an ongoing basis.

Create a Flexible Development Plan Incorporating Stakeholder and Customer Input

The Joint Utilities are encouraged by Staff's statements that indicate its intent for IEDR decision-makers (including, but not limited to, the Program Manager, Steering Committee and Solution Architect) to collaborate with stakeholders to prioritize use cases and develop the platform methodically on an ongoing basis, rather than waiting years to deliver a more fully-evolved product.²⁴ The Joint Utilities agree that the IEDR development approach should be nimble, able to respond to evolving market needs and technological capabilities in a timely and cost-effective manner while providing upfront value that third parties and developers need to design and launch products. Achieving this vision goes beyond a simple modular approach of adding data sets over time; it requires iteration of many aspects of the platform, including data

²⁴ Data Access Proceeding, IEDR Whitepaper, pp. 31-32.

sets to user experience, analytics tools and consent mechanisms. This is especially true given that the utilities and other potential data custodians each begin from unique starting points that must be taken into consideration.

Based on the Joint Utilities' recent experience with implementing and managing complex data-intensive systems, the most realistic way to develop a multi-use, dynamic platform like the proposed IEDR is to start with the expectation that it will be an iterative process and plan accordingly. For example, the process can begin with initial use cases and the minimum data and user functionality needed to effectuate them, launch a minimum viable product, and build lessons learned into planning for future phases, while conducting customer research and stakeholder engagement on an ongoing basis. Later phases can incorporate customer and stakeholder feedback, introduce support for additional use cases, pilot incremental functionality and update technical components as needed. By establishing this type of flexible development plan at the outset, the teams working on the IEDR will be able to adapt to utilities' evolving data availability and capabilities, stakeholder feedback, and introduction of expected new privacy or consent rules without having to go back to the drawing board.

Prioritize Use Cases Based on Cost-Effectiveness and Stakeholder Value

The Joint Utilities agree with the IEDR Whitepaper's recognition that the platform should evolve from a set of baseline or core use cases and system requirements. The IEDR Whitepaper offers a strong beginning to this process with an initial list of use cases²⁵ and the Commission should direct Staff and NYSERDA to work with interested stakeholders, including the utilities, to refine those use cases and specify the data and functionality requirements of each. As the

²⁵ Data Access Proceeding, IEDR Whitepaper pp. 32-34.

IEDR Whitepaper notes, “the IEDR’s contents and capabilities should evolve in a sequence that closely aligns with use case priorities that are determined on the basis of stakeholder value, feasibility, and advancement toward the State’s energy policy goals.”²⁶ As the design process moves forward, use cases should be prioritized based on cost considerations, availability of current utility data and systems to export the data, use for core utility functions, and value offered relative to the achievement of New York’s climate objectives.

As Staff, NYSERDA, the Joint Utilities and stakeholders evaluate and align on use case priorities, Appendix B from the IEDR Whitepaper should be viewed as a *potential* reservoir of data points that may be included with particular use cases that will be developed during the iterative design and planning process. Appendix B should not be considered the “minimum viable data set” deemed necessary to launch the first version of the IEDR, as proposed in the Whitepaper. Doing so would necessitate a scope that is unrealistically broad for both IEDR system developers and the distribution utilities, and which could easily result in the commitment of significant capital, time, and human resources while delaying benefits to customers and DER providers for years. In contrast, an iterative development process that builds from a limited set of initial capabilities would mitigate these risks and create opportunities to benefit from lessons learned. It would also enable subsequent development stages to reflect emerging market needs while also assessing evolving data privacy and security concerns.

²⁶ Data Access Proceeding, IEDR Whitepaper, p. 23.

Leverage Utilities' Existing and Planned Information Systems

Since 2014, the Joint Utilities have made substantial investments in information systems and data sharing capabilities that facilitate the State's Reforming the Energy Vision (REV)²⁷ and clean energy initiatives, including, for example, AMI technology customer service system investments, hosting capacity maps, Non-Wires Alternatives opportunity websites, REV connect pilots, the Utility Energy Registry, data-rich digital resources for customers and their agents, and consent-based data sharing technologies like GBC and Con Edison's Third Party Access to My Account tool.²⁸ Taken together, these investments represent a large part of the foundational infrastructure that is necessary for the Joint Utilities to facilitate achievement of Staff's vision for the IEDR. The data flowing from and across these foundational systems will dictate what information can be made available to third parties in the IEDR and other data sharing platforms. For utilities that do not have or are not pursuing AMI, the IEDR should not be read to mandate any changes that would require adoption of AMI by such utilities.²⁹ As such, it is essential that the IEDR development plan accurately reflect the varying timelines of each utility in creating and putting such foundational systems into service.

Learn from the State's Pilot IEDR

O&R's experience with the State's Pilot IEDR provides important insights related to the Pilot's strategic reliance on manual processes and the importance of robust cyber security and governance structures. The Pilot was designed by DPS Staff, NYSERDA and O&R to meet

²⁷ Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* (REV Proceeding).

²⁸ These data sharing mechanisms were developed in response to previous Commission Orders to serve specific use cases. The development of a statewide data platform would not necessarily avoid the need to continue to maintain these existing data sharing processes.

²⁹ The implementation of AMI is costly and complex, and a utility's decision to pursue AMI or other large-scale capital investments is driven by many factors well outside of the scope of this proceeding.

rapid development timelines approved by the Commission. The Commission stated that it “expects the [Pilot IEDR] will provide crucial information regarding which entity is best suited to host a potential statewide platform, algorithms needed to produce the most useful information, the parameters of allowed queries, protection of data, availability of certain data, utility protocols, cost recovery, and access fees.”³⁰ In light of this scope, the project team strategically avoided implementation barriers that the statewide platform will have to address, as these would have stymied the Pilot IEDR’s timeline and budget. This approach made sense for an experimental pilot project but it limited the Pilot IEDR’s potential learnings, particularly as they relate to sourcing data from multiple systems, establishing machine-to-machine data transfers, and combining customer and system data.

Nevertheless, leveraging experience with the Pilot IEDR is crucial to understand the tremendous scope of work required to implement something similar or greater on a statewide scale. For example, the Pilot IEDR cost of \$240,000 cited in the IEDR Whitepaper is not an appropriate benchmark. This amount does not begin to cover the full cost of implementing the Pilot IEDR. Furthermore, the Pilot IEDR is not comparable in scale and functionality to the IEDR envisioned in the IEDR Whitepaper.³¹ Scaling such efforts from the initial 10,000 customers to 230,000+ customers – an effort that O&R began in April 2020, after the Pilot IEDR’s initial launch – has required additional work and revealed additional challenges. Moving from the 230,000+ O&R customer population to millions of customers across New York State will necessarily require development of significant automation capabilities.

³⁰ Case 18-E-0130, In the Matter of Energy Storage Deployment Program, *Order Establishing Energy Storage Goal and Deployment Policy* (issued December 13, 2018), p. 85.

³¹ The Pilot IEDR was scoped to be a searchable data platform containing both customer and system data, allowing for complex, developer-designed, select queries across all categories of customer and system data stored in the database. However, at this point system data has not been included in the Pilot IEDR.

Cost Considerations

Creation and commissioning of the core parts of the IEDR platform will be a major undertaking at considerable expense.³² In addition to the costs of developing the IEDR specifically, customers at each utility will incur costs to upgrade systems and create necessary interfaces with IEDR infrastructure. The Joint Utilities manage multiple systems for customer usage data, system performance data, system planning data, and others. These systems are subject to diverse privacy and security constraints and differing industry standards. All told, the Joint Utilities estimate that the investments necessary to standardize and transfer granular interval data for millions of utility customers with billions of complex system data points could cost hundreds of millions of dollars.

The Electric Reliability Council of Texas's (ERCOT) creation of a common retail portal for customers and retail suppliers to receive interval data from transmission and distribution utilities provides a helpful data point for benchmarking purposes. The deployment of the Smart Meter Texas 1.0 and 2.0 platforms combined cost more than \$80 million, and these platforms both lack major functionalities required for the IEDR, including third-party authentication and anonymized customer searching capability. In New York, many of the Joint Utilities have already spent time and resources on mandated projects such as GBC and hosting capacity maps.³³

As a result, the Joint Utilities strongly recommend that cost recovery for implementation of the IEDR be clarified before development is approved. The IEDR Whitepaper states:

³² The Joint Utilities urge further consideration and discussion among Staff and stakeholders regarding the funding mechanisms for the IEDR before it moves forward and give at least initial consideration to funding mechanisms that could shift all or some of these costs away from utility customers, either by contribution of third parties or through other existing funding mechanisms.

³³ Con Edison and O&R have spent \$9.5 million on implementation of GBC to date.

“Funding should be provided from all jurisdictional electric and gas ratepayers.” This passage also states that the Long Island Power Authority (LIPA) and the New York Power Authority (NYPA) “will engage in the IEDR development and implementation process.”³⁴ The Joint Utilities support LIPA and NYPA involvement in the IEDR process, and emphasize that their involvement is critical to develop a statewide platform. However, LIPA and NYPA should also share in the costs of the IEDR’s design and implementation to the extent they will benefit from integration with it, as should other entities to the extent that cost-sharing is found appropriate and consistent with the broader goals Staff has identified. The IEDR Whitepaper is silent on this issue and its associated cost recovery mechanics. The Joint Utilities recommend that cost recovery mechanisms be transparent to all stakeholders before approving an implementation plan and, as noted above, give due consideration to funding mechanisms in addition to the costs solely borne by utility customers through rates.

Additionally, while the Joint Utilities appreciate Staff’s intent to standardize the data offerings across the Joint Utilities, not all system and customer data can and should be centralized. Decisions related to centralization versus standardization should consider cost-effectiveness and must accommodate the different timeframes in which utilities will be able to provide data to, and establish interfaces with, a centralized platform. For example, for hosting capacity, each of the Joint Utilities provides analysis of its system data to produce complex outputs of equivalent level of granularity across the state. Such uniformity would simply not be possible by providing raw data. Rather, important analytical work accounts for differing system design and operation to produce consistent results. The design work of an IEDR should

³⁴ Data Access Proceeding, IEDR Whitepaper, pp. 26-27.

programmatically consider the costs and benefits of standardized (to the extent possible) products remaining on utility portals with the IEDR being a gateway versus centralization.

Liability and Risk

The Joint Utilities expect to provide system and customer data to the statewide platform at the direction of the Commission. As a consequence, liability for information security and other risks that apply after information is transmitted to the platform must not remain with the utilities. Staff and the Commission should clearly define limitations on liability for the Joint Utilities following the transmittal of data to the platform.

The Joint Utilities offer the following additional comments on specific sections of the IEDR Whitepaper:

- 3.1.1. Utility System Information Portals: The IEDR Whitepaper states that available hosting capacity data applies only to solar sources, lacks granularity, is updated too infrequently with no forecasts, and does not include electric vehicles (EV) or charging resources.³⁵ This characterization is out of date: the Joint Utilities' Stage 3.0 Hosting Capacity Analysis (HCA) maps expanded the granularity of the displays to the sub-feeder-level.³⁶ The Joint Utilities regularly solicit Stakeholder feedback on the Hosting Capacity and have been effective at turning those insights into timely updates. Stakeholder feedback informs a common implementation roadmap that drives standardized sets of information across the state. A Joint Utilities survey of DER developers in Fall 2019 indicated the need to prioritize three items for the near-term

³⁵ Data Access Proceeding, IEDR Whitepaper at 16.

³⁶ These enhanced hosting capacity maps were made available on October 1, 2019.

statewide HCA roadmap: 1. load serving capacity maps; 2. increased refresh rates; and 3. a Representational State Transfer – Application Programming Interface (“REST API”) to facilitate third-party access. On the first, consistent with the requirements of the EV Make-Ready Order,³⁷ the Joint Utilities will be releasing the first load serving capacity maps at a consistent level of granularity at the substation, circuit, or feeder level, before the end of 2020. On the second, the Joint Utilities will be move from the previous annual update cycle to a six-month refresh for any feeder with over 500kW of distribution generation interconnected. On the third, each member of the Joint Utilities will add a REST API to enable third-party access and hosting by the end of 2020.

- 4. Notable Energy Data Initiatives in Other States: The IEDR Whitepaper benchmarking discussion lacked acknowledgements of crucial data privacy changes that may impact the Joint Utilities’ ability to provide customer information. California enacted the California Consumer Privacy Act (CCPA) in 2018, which gives consumers more control over personal information businesses collect and includes utility information.³⁸ Many other states, including New York and New Jersey, have similar legislation pending. Any data sharing platform must carefully consider impacts of such expected privacy provisions.
- Appendix B: Staff requested comment “from the utilities on the ability of their respective systems and processes, as they exist today, to provide to the IEDR the data items listed in Appendix B,” including cost estimates for these data elements and estimated savings.³⁹ There are aspects of Staff’s request that are not detailed to the point that the Joint Utilities can prepare a cost estimate. For instance, Appendix B does not provide details

³⁷ Case 18-E-0138, *Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure*.

³⁸ <https://bit.ly/327HP1t>

³⁹ Data Access Proceeding, IEDR Whitepaper at 27.

concerning data refresh rates, how to handle data gaps with elements listed, etc. These details, while technical and complex, have a substantial impact on the data sharing strategy implemented, as critical decisions vary by strategy and heavily influence costs. As a result, the Joint Utilities cannot provide a cost estimate for completing the Appendix B data request at this early stage of the proceeding, nor would such an undertaking be a reasonable use of resources prior to further refinement of the IEDR development plan as recommended above.

IV. Responses to the Commission's Questions

The subsections in this Section IV provide the Joint Utilities' responses to four specific questions included in the Notice.⁴⁰

1. Regarding efforts to ensure data quality and integrity, what data quality and integrity standards should be considered, as well as what type of metrics can be used as a means to determine if these standards are working?

It would be premature to prescribe metrics before the Framework is better defined and, in particular, before stakeholders, including the Joint Utilities, have had an opportunity to clarify with Staff exactly how far-reaching such standards could be (*e.g.*, would these data quality and integrity standards cover all existing data sharing platforms, including those established voluntarily by one or more utilities?), and what objective(s) Staff believes such standards would achieve.

The integrity of data is commonly understood to mean that the data are consistent, accurate, and relevant over the entirety of the period in which they may be used.⁴¹ The data

⁴⁰ Data Access Proceeding, Notice, p. 3.

⁴¹ Boritz, J. "IS Practitioners' Views on Core Concepts of Information Integrity," *International Journal of Accounting Information Systems*, Vol. 6, No. 4, 2005, pp. 260-279. "Data integrity is the maintenance of, and the assurance of the accuracy and consistency of data over its entire life-cycle."

quality and integrity standards that are ultimately defined in this proceeding should acknowledge that data quality and integrity require that the use of data be aligned with the manner and purpose for which the data were collected. For example, substation and circuit interval meter data meant for distribution system operation and planning purposes adheres to a certain standard for frequency, accuracy, and latency, while meter data used for customer billing reflects a different standard for frequency, accuracy, and latency. Metrics of data quality and integrity must reflect those underlying differences in purpose.

Additionally, any quality and integrity standards must recognize that data has a specified lifetime, defined as part of its purpose. Customer interval data may be updated more regularly than other types of system data, for example. Without further refinement to work through these types of issues, the data quality and integrity standards that Staff seeks at this early stage run the risk of being ill-defined, impractical and unnecessarily burdensome for data custodians.

2. In evaluating the success of the proposed Data Access Framework, what reporting requirements should be established, including frequency of any required reporting, as well as any specific metrics that should be captured to evaluate success?

The Joint Utilities are supportive of reasonable reporting that can provide validation that the iterative development process that will produce the Framework is working properly. Again, however, it is premature to prescribe reporting requirements before the Framework features are more comprehensively articulated. Reporting standards should depend on the entities that are required to provide reporting: utilities will be required to provide certain information and should be bound by certain reporting requirements that are a function of Framework design features. ESEs that secure access to customer and/or system data should have a different set of reporting requirements that may be a function of other aspects of the ultimate Framework. A third set of

reporting requirements should apply to the Program Administrator based on its accountabilities.

Examples of potentially appropriate reporting requirements include:

- Turnaround time on applications for access to customer and/or system data;
- Number of ESEs certified;
- Number of complaints filed against ESEs;
- Provider costs; and
- Reports of theft/data breaches from ESEs.

3. Under what situations should customers be afforded the opportunity to opt-out of having their data used, including use by the utility to develop new products and services, as well as having their data included in a larger aggregated dataset that keeps the customer’s identity anonymized?

The Joint Utilities remain committed to protecting customer privacy and ensuring data security.⁴² At a minimum, explicit consent must be required for the release of customer specific energy or billing information. The Joint Utilities support the Commission’s repeated affirmation of its policy that customer specific information should not be shared with third parties unless the customer has consented. To this end, stakeholders seeking customer consent to share customer specific information and other restricted data must provide customers with information as to (1) the type of information to be obtained; (2) identification of the entities that will receive the data; (3) a description of how data will be used; and (4) the period to which expressed consent applies.⁴³ Further, the Joint Utilities agree with Commission policy and precedent that protects

⁴² See, e.g., CEF Proceeding, Joint Utilities’ Response to the New York State Energy Research and Development Authority’s Petition Regarding Utility Customer Data and Legacy Reporting (filed February 26, 2018), p. 3, “it is important to strike the appropriate balance between advancing clean energy objectives while maintaining customer privacy and data security.”

⁴³ See Case 15-M-0180, *In the Matter of Regulation and Oversight of Distributed Energy Resource Providers and Products*, Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers (issued October 19, 2017) (UBP-DERS Order), pp. 7-8, See also Case 98-M-1343, *In the*

private and confidential customer data.⁴⁴ As the Commission has noted, failure to safeguard customer privacy may risk damaging “public perception regarding the management of sensitive customer data.”⁴⁵ As such, customers should be permitted to opt-out of having their identifiable information shared. With respect to the sharing of aggregated anonymized information, the Commission’s existing policies⁴⁶ should continue to be applied, both by the Joint Utilities and any other third-party operator of the statewide data platform. As noted earlier, any sharing must be balanced with expected privacy legislation.

4. Regarding the development of an opt-out pilot program, how should such a pilot be structured and what criteria should be included to ensure consumers are provided appropriate notice and opportunity for opt-out?

The Joint Utilities do not support an opt-out pilot that would require utility customers to opt out of disclosure of their customer-specific information. Staff has not demonstrated with any level of specificity why contradicting established customer consent requirements⁴⁷ is warranted. At a minimum, before the Commission adopts a pilot that would share customer-specific information without the customers’ explicit consent, feedback should be solicited from customers to understand customer preferences regarding sharing information with third parties, many of which would be obtaining this information solely for the purposes of marketing to customers. If, however, the Commission does consider changing its policies related to

Matter of Retail Access Business Rules, Order Adopting Revised Uniform Business Practices (issued January 19, 2018) (ESCO UBP Order), p. 21.

⁴⁴ EEPS Proceeding, OPower Order, p. 17.

⁴⁵ EEPS Proceeding, OPower Order, p. 18.

⁴⁶ See Cases 16-M-0411 *et al.*, *In the Matter of Distributed System Implementation Plans* (DSIP Proceeding), Order on Distributed System Implementation Plan Filings (issued March 9, 2017), p. 26, where the Commission adopted the 15/15 residential data privacy aggregation standard; *see also* DSIP Proceeding, Order Adopting Whole Building Energy Data Aggregation Standard (issued April 20, 2018), p. 11, where the Commission adopted the 4/50 whole-building data aggregation standard; *see also* Cases 17-M-0315 *et al.*, *In the Matter of Utility Energy Registry*, Order Adopting Utility Energy Registry Order (issued April 20, 2018), pp. 24-25, where the Commission adopted the 6/40 small commercial and other data privacy aggregation standard.

⁴⁷ EEPS Proceeding, OPower Order, pp. 17-18.

customer-specific data the administrator of such a program should require extensive customer outreach, including multiple notifications to customers before the opt-out period expires, and simple methods for customers to opt-out.⁴⁸ Customers must have adequate notice of the need to opt-out, and providing that notice to customers is time-consuming and expensive. Any consideration of such an opt-out pilot must consider who bears the cost of conducting the pilot.

The Joint Utilities also caution that General Data Protection Regulation (GDPR) recently enacted in the European Union as well as the CCPA could signal expectations for customer privacy movements in the United States. If a similar policy were enacted, and such legislation is pending in New York, opt-out programs may not be legally permissible.⁴⁹

V. Conclusion

The Joint Utilities look forward to additional collaboration with Staff and stakeholders to build on data sharing practices in place today and produce efficient and cost-effective approaches to making practical use of energy data. As discussed throughout these comments, the Joint Utilities believe that an iterative and progressive approach to developing the Framework and the IEDR offer the best chance for accelerating the deployment of clean energy in New York and creating benefits for customers throughout the State.

The success of the Framework and the IEDR hinges on having the Joint Utilities deeply involved in governance and oversight of the design, implementation, and operational phases of

⁴⁸ The Staff IEDR Whitepaper proposes to pilot opt-out, and specifically suggests that such a pilot could focus on obtaining opt-out at the time service is initiated, or when a customer signs up for a time-of-use rate or community distributed generation project. This suggestion is perplexing because presumably the customer is taking affirmative action to obtain service or sign up for a special rate, and they could also be given the opportunity to affirmatively consent to their data being shared conveniently at that time. Thus, development of an acceptable opt-out pilot requires significant further discussion.

⁴⁹ <https://gdpr-info.eu/>

these initiatives. This will ensure that insights and expertise related to the critical information systems will be reflected in deployment plans, and that investments are appropriately directed to elements that will create value for customers.

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Respectfully submitted,

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