

STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

Case 17-M-0315 – In the Matter of the Utility Energy Registry.

Case 20-M-0082 – In the Matter of the Strategic Use of Energy Related Data.

DEPARTMENT OF PUBLIC SERVICE STAFF PROPOSAL ON THE TRANSITION OF
UTILITY REPORTED COMMUNITY-SCALE ENERGY USAGE DATA

Dated November 8, 2023

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Introduction

On April 20, 2018, the Public Service Commission (Commission) directed the New York State Energy Research and Development Authority (NYSERDA) and the utilities to fully implement the Utility Energy Registry (UER).¹ The UER is an online platform that provides streamlined public access to aggregated community-scale energy usage data consistent with the UER data protocol in which New York State's investor-owned utilities (utilities) are required to report biannually per Commission directive. Over the past 5 years, the UER has been providing public access to aggregated monthly electric and natural gas consumption data which, to this day, continues to enable communities to track energy performance over time and create localized energy planning strategies. Local governments require access to community-scale energy usage data to enact codes, control municipality-owned energy assets, develop projects, adopt energy policies, and regulate land use. The UER's value of having community-scale energy usage data readily available has significantly benefited the development and progress oversight of communities' energy and climate goals, all while contributing largely to New York State's clean energy targets.

As demonstrated by the utilization of the UER, effective access to useful energy data plays a critical role in New York's clean energy transformation. Enabling useful access of integrated energy customer data and energy system data into one statewide centralized platform with the goal of speeding the deployment of clean energy solutions, the Commission, on February 11, 2021, issued its Order Implementing an Integrated Energy Data Resource (IEDR).² The IEDR Order directed the implementation of an IEDR to securely collect, integrate, and provide broad and appropriate access to large and diverse sets of useful energy-related information on one statewide data platform. Within the IEDR Order, the Commissions directed the utilities to work with NYSEDA and the Department of Public Service (DPS or Staff) to implement a statewide IEDR. The IEDR Order also designated NYSEDA as the IEDR Program Sponsor responsible for defining, initiating, overseeing, and facilitating the IEDR Program on behalf of New York State.

The purpose of this proposal is to seek Commission approval on the transitional and procedural processes required to eliminate the utilities' UER reporting responsibilities once the IEDR can produce and publish aggregated community-scale energy usage data. This will eliminate the need for duplicative utility-transferred energy usage data and reporting. Specifically, the Commission should relieve the utilities' UER compliance requirements, which include the aggregation and reporting of community-scale energy usage, Community Choice Aggregation (CCA) opt-out eligible load, installed capacity (ICAP) tags, and distributed energy resources (DER) generation data directly to the UER as the IEDR will, in time, securely collect customer energy

¹ Case 17-M-0315, In the Matter of the Utility Energy Registry, Order Adopting Utility Energy Registry (issued April 20, 2018) (UER Order).

² Case 20-M-0082, Strategic Use of Energy Related Data, Order Implementing an Integrated Energy Data Resource (issued February 11, 2021) (IEDR Order).

usage data (CEUD) from the utilities. The IEDR will be capable of integrating and aggregating CEUD on a community level and provide public access to community-scale energy usage data. This proposal also acknowledges the productive efforts of the UER Working Group and discusses a conceivable solution for the IEDR to obtain CCA program performance metrics.

Background

Utility Energy Registry

The UER was developed to promote and facilitate community-based energy usage planning, energy-use awareness, engagement, and assist with the development of community-based energy programs – such as CCA.³ On Earth Day, 2018, the UER Order directed NYSERDA and the utilities to fully implement the UER, adopted the data sets and privacy screens for inclusion of certain data sets on the UER, and established utility reporting requirements. Recognizing that the UER Order was a starting point and anticipating the need to modify and refine UER requirements in the future, the Commission directed DPS and NYSERDA to convene a stakeholder input process and file a UER status report on the progress of the UER's operations, including the demand for, and uses and benefits of, the UER data, as well as the need for possible refinements. On December 30, 2019, NYSERDA, in partnership with Climate Action Associates, LLC., filed a UER Status Report.⁴ The Status Report described the progress of New York's existing UER protocol, explained the challenges faced during the first year of operation, and identified several recommendations on how to improve the UER via advances such as refining document methodologies, restructuring UER data fields, and increasing access to UER data. Many of the recommendations proposed within the UER Status Report were addressed by the Commission's August 21, 2021, Order Adopting Utility Energy Registry Modifications.⁵ The UER Modification Order improved the structure of the utility-reported data fields and rebalanced the application of UER use case-specific privacy screens. Also, within the UER Modification Order, the Commission directed NYSERDA to form a standing UER Working Group to manage and publish versions of the NY UER Protocol. The standardized data protocols developed within the UER Protocol allow for the reporting of aggregated data in a consistent manner that, in sequence, improves the quality of data received and reduces the communities' administrative costs and burdens.

³ The UER has two parts - a data protocol, and an online data application. The NY UER Protocol defines the standard set of data streams that are published and maintained.

⁴ Case 17-M-0315, UER Status Report (filed December 30, 2019) (Status Report).

⁵ Case 17-M-0315, Order Adopting Utility Energy Registry Modifications (issued August 12, 2021) (UER Modification Order).

The following is a high-level summary of the current UER data protocol which was discussed in detail and adopted within the UER Modification Order:

- Privacy screens were revised to adopt a customer count of four to expand data availability.
- Reporting categories were modified to align service class aggregations with the U.S. Energy Information Administration (EIA) sectors utilizing utility submitted Residential (R), Commercial (C), and Industrial (I), or R, C, and I rate class maps.
- Distributed Energy Resources (DER) data fields were added in the UER data protocol.
- Utility-reported data on Community Choice Aggregation (CCA) eligible load and customer count were modified to better support CCA program's data needs.
- CCA Administrators were established as data publishers to report new data fields regarding the number of CCA participants within each municipality and CCA participating load for that municipality, with a carve out for the renewable composition of CCA-provided electricity.

The requirement adopted within the UER Order that utilities report monthly aggregated data twice per year for the preceding 6 months was not revised by the UER Modification Order. The utilities publish three maps in the UER National Geography Layer Library including:

1. US Counties – A map of all 62 counties in New York.
2. Communities – A map of NY incorporated local authorities, including villages, towns, and cities. All entities correspond to a Census “minor civil division” or “places.”
3. Zip Codes – All postal zip code polygons and points from the 2016 USPS zip code database. Zip code-level data are only reported for New York City.

Initially, utilities were compiling data by querying their enterprise systems to generate reports in accordance with the UER data protocol. These reports were submitted to NYSDER and their UER consultant, Climate Action Associates, LLC., and then published to the UER platform.⁶ Most recently, the UER Working Group developed the UER template generator which allows utilities to complete machine-readable import files which are then uploaded directly into the UER platform. Utilities remain responsible for the quality and accuracy of the data in which they include in their import files.

Integrated Energy Data Resource

On February 11, 2021, the Commission directed the planning, design, implementation, and operation of a statewide IEDR that will collect, integrate, analyze, and manage a wide variety of standardized energy-related information from the State's utilities and other sources. Integrating such information in one location will enable DER providers, utilities, energy consumers,

⁶ <https://utilityregistry.org/app/#/>

government agencies, and others to develop valuable technical and business insights more readily by using queries and other functions to filter, aggregate, analyze, and generate useful information. The creation of an IEDR will provide New York's energy stakeholders with a platform that enables effective access and use of such integrated energy customer data and energy system data.

The IEDR Program is following a development approach that identifies and prioritizes stakeholder use cases that provide the greatest value to New York residents as the State achieves its nation-leading climate goals. The data needed to generate these use cases, such as DER siting, CCA, and community-scale energy usage data, continue to be sourced, mapped, and defined by the IEDR Program team as the implementation of the platform's functionality develops.

Within the IEDR Order, the Commission notes that several programs have been initiated relating the various aspects of accessing and using energy customer data and energy system data. At the time the IEDR Order was adopted, the Commission specified actions necessary for the next steps to substantially increase useful access to useful energy-related data through the IEDR, while not prematurely transitioning away from data access tools and resources that are already operational. With the consideration of the time needed to implement IEDR capabilities, it was necessary and reasonable for the utilities to maintain existing data access resources and to continue developing currently planned resource enhancements and additions that would provide stakeholders with access to data.

The IEDR's initial public version (IPV) was launched on March 31, 2023, and will continue to be improved through the release of the IEDR Minimum Viable Product (MVP) in Q4 2023 and, as directed by the Commission, in Phase 2 of the program through mid-2026.^{7,8} While the IEDR is currently able to receive CEUD from the utilities, Staff recognizes that further development, deployment, and maintenance of CEUD related use cases is dependent on the IEDR Phase 2 Proposal.⁹ On May 12, 2023, NYSERDA filed the IEDR Phase 2 Proposal within the Strategic Use of Energy Related Data Proceeding that, among additional topics, laid out the proposed road map discussing approximately 40 additional use cases planned for implementation during IEDR's Phase 2 expansion.

⁷ Case 20-M-0082, Order Addressing Integrated Energy Data Resource Matters (issued October 13, 2023) (IEDR Matters Order).

⁸ The IEDR Matters Order clarified the Commission's intent that utilities directed to participate in the development of the IEDR will be required to share non-aggregated, non-anonymized CEUD with the IEDR to support a range of use cases.

⁹ Case 20-M-0082, Integrated Energy Data Resource Program Phase 2 Proposal Status Report (filed May 12, 2023) (IEDR Phase 2 Proposal).

Transition of Community-Scale Energy Usage Data to the IEDR

Utility-Provided Community-Scale Energy Usage Data

Staff proposes that the current UER data protocol persists during the transition of community-scale energy usage data hosting to the IEDR.¹⁰ As previously discussed, the data that the utilities publish to the UER are entered by the utility using machine readable templates. These templates assist the utilities with their obligation to import files directly to the UER. The import files contain blank fields in which the utilities enter their compiled data. To date, these data are available on the Open NY Data website, as well as the UER platform.¹¹ During the transitional period, Staff proposes that the utilities continue to report their UER data to NYSERDA, and that NYSERDA will remain responsible for collecting and providing public access to data through, including but not limited to, Open NY. Data fields in which the utilities are currently responsible for producing to comply with the UER data protocol should remain during the transition.

When CEUD becomes available in the IEDR and the IEDR adopts a use case to integrate the community-scale energy usage data on the statewide centralized platform, NYSERDA would then notify the utilities to stop reporting their UER data protocol import files directly to NYSERDA as the IEDR will, then, be responsible for producing and publishing the community-scale energy usage data. NYSERDA should be responsible for ensuring that all historical community level usage data, reported by utilities over the years, be stored and accessible to the public via Open NY.

Proposed IEDR Process

Staff proposes that the IEDR should not be required to replicate the existing UER platform or UER protocol. Instead, the IEDR would implement a Community Energy Planning use case which includes community-scale energy usage data outputs which, like the community-level aggregated data accessible by means of the UER, are consistently used by municipalities for their community energy planning needs. As discussed within the IEDR Phase 2 Proposal, the use cases identified for Phase 2 may be updated, deferred, split into multiple use cases, or otherwise modified or removed in the final roadmap because of data availability, evolving stakeholder needs, the identification of higher priority use cases, or unforeseen shifts in the market. As the IEDR Phase 2 Proposal includes a CCA Implementation use case that identifies similar data fields as to what would be needed to facilitate a community's understanding of its energy usage data, Staff proposes that the CCA Implementation use case be modified to become a Community Energy Planning use case. Staff recommends that the community-scale energy usage data for the use case be calculated and presented using a privacy screen count of four, in line with the privacy screen currently used for the UER, and that community categories remain in alignment with the service class aggregations of the EIA R, C, and I rate class maps. Akin to the

¹⁰ <https://utilityregistry.org/app/UER.New.York.Community.Data.Protocol.July.2023.pdf>

¹¹ Open NY is the award-winning initiative of policies, programs and tools that provide public access to digital data for collaboration and analysis. <https://data.ny.gov/>

Commission's decision within the UER Modification Order, a privacy screen of four will improve the availability of community-scale energy usage data which will be publicly available via the IEDR. As the Data Access Framework Order adopted a statewide aggregated data set privacy screen of 4/50, the Data Access Framework Order also determined that, in the case where a data access application or initiative, such as the UER or IEDR, adopts a privacy screen distinct from the 4/50 privacy screen, that differentiated privacy screen shall be applied solely to that use case or application addressed, unless otherwise directed by the Commission.¹² The Data Access Framework Order was also clear in determining the path for policy changes as they relate to specific use cases, such as the IEDR. As such, Staff recommends that the count of 4 privacy screen be used only when community-scale energy usage data is constrained to the State's geospatial county, municipality, or, for New York City, zip code boundaries.

With the expansion of available energy-related data, the IEDR will also be capable of using CEUD to create energy consumption aggregations at various levels of geospatial granularity based on stakeholder input and existing utility aggregation processes. This aggregated information will be presented in combination with other useful energy data sets in line with stakeholder driven use cases and will be required, unless otherwise directed by the Commission, to use the statewide aggregated data set privacy screen of 4/50.

Consistent with any data transferred to the IEDR, the IEDR would not be responsible for the quality and integrity of the data it receives from the utilities. After the data has been transferred and stored to the IEDR, the IEDR – as a data custodian - will be responsible for ensuring the data is compiled and provided in conformance with Community Energy Planning use cases' aggregation privacy screens and standards. As reiterated in the October 13, 2023, IEDR Matters Order, the utilities are responsible for reporting the defined customer energy usage data fields to the IEDR for facilitation of the IEDR use cases, including for support of any forthcoming Community Energy Planning use cases.

Finally, Staff proposes that all stakeholder engagement activities related to Community Energy Planning use cases should be consistent with the IEDR stakeholder engagement process. This will provide crucial feedback required to prioritize and expand relevant data access on the IEDR and help to determine which aggregated data points - such as CCA opt-out eligible load, ICAP tags, and DER generation data - are provided by the IEDR in the future.

CCA Administrators as UER Data Publishers

As directed within the UER Modification Order, CCA Administrators were required to report data fields intended to demonstrate the reach and impact of CCA programs in New York State. As the State transitions to one statewide centralized platform, CCA Administrators should be dismissed of their UER data publishing requirements as these data fields are now publicly reported on a

¹² Case 20-M-0082, Strategic Use of Energy Related Data, Order Adopting a Data Access Framework and Establishing Further Process (issued April 15, 2021) (Data Access Framework Order).

quarterly basis for each community participating in the State's CCA program.^{13,14} Moving forward, Staff recommends working with the IEDR Program team on potential pathways, such as the use of machine-readable import files, to support efficient and effective inclusion of these CCA performance metrics into the IEDR.

Conclusion

As the UER working group concludes, Staff would like to take this opportunity to thank NYSERDA, Climate Action Associates, LLC., the utilities, CCA Administrators, and others for their involvement, commitment, and collaboration that, together, created a valuable community-scale energy usage data platform that assisted communities, among others, with their greenhouse gas inventories, climate goals, and energy planning. Staff would also like to encourage all involved stakeholders to continue to provide their valuable feedback in future opportunities.

The Commission recognized that the implementation of the IEDR's statewide centralized platform would take time and that existing data related access resources were to continue developing their planned resource enhancements and additions during IEDR Program's development and launch. Now that the IEDR will soon be able to implement the functional capabilities necessary to enable effective access and use of integrated energy customer data and energy system data, the expected transition of community-scale energy usage data to the statewide platform is cost effective and in-line with DPS' vision of having energy-related information accessible in one place. With that, DPS recognizes that the incorporation of community-scale energy usage data is not the only workstream or set of use cases that may have overlap with existing data resources, including hosting capacity maps, customer data access portals, and building energy benchmarking resources. As such, DPS will regularly evaluate IEDR progress in coordination with the IEDR Program's team and make recommendations for Commission consideration regarding existing data resources on an ad hoc basis. As IEDR's functionality expands, DPS is fully committed to warranting the enablement of useful access of integrated energy customer data and energy system data into one statewide centralized platform ensues.

Staff submits this proposal for public comment before coming back to the Commission for a decision.

¹³ Case 14-M-0224, Community Choice Aggregation, Order Modifying Community Choice Aggregation Programs and Establishing Further Process (issued January 19, 2023) (CCA Modification Order).

¹⁴ Per the CCA Program's rule and requirements, CCA Administrators are obliged to report, on a quarterly basis, their participating community's program's energy use and customer count in public filings under matter number 17-00974.