

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on December 19, 2024

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
James S. Alesi
John B. Maggiore
Uchenna S. Bright
Denise M. Sheehan
Radina R. Valova

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

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

ORDER APPROVING TRANSITION OF
UTILITY REPORTED COMMUNITY-SCALE ENERGY USAGE DATA

(Issued and Effective December 20, 2024)

BY THE COMMISSION:

INTRODUCTION

On November 8, 2023, Department of Public Service Staff (Staff) filed a proposal on the transition of utility reported community-scale energy usage data (Proposal).¹ Under the Proposal, the major investor-owned utilities (IOUs)² would stop reporting aggregated community-scale energy usage data for

¹ Cases 20-M-0082 and 17-M-0315, Department of Public Service Staff Proposal on the Transition of Utility Reported Community-Scale Energy Usage Data (filed November 8, 2023).

² These IOUs include Niagara Mohawk Power Corporation d/b/a National Grid, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, Inc., New York State Electric & Gas Corporation, and Rochester Gas and Electric Corporation.

the purposes of publishing the Utility Energy Registry (UER) data protocol once the Integrated Energy Data Resource (IEDR) is capable of producing and publishing aggregated community-scale energy usage data.³ Specifically, the Proposal recommended that, once the IEDR has the necessary data, the Commission relieve the IOUs of the UER compliance requirements, which include the aggregation and reporting directly to the UER of community-scale: (1) energy usage; (2) Community Choice Aggregation (CCA) opt-out eligible load; (3) installed capacity (ICAP) tags; and (4) distributed energy resources (DER) generation data.

Pursuant to this Order, the Public Service Commission (Commission) adopts the recommendations set forth in the Proposal. Explicitly, the Commission sets forth the required IOUs' transitional and procedural processes necessary to ensure that community-scale energy usage data is publicly available.

BACKGROUND

Utility Energy Registry

The UER was developed to promote and facilitate community-based energy usage planning, awareness, and engagement, and assist with the development of community-based energy programs.⁴ In April 2018, the Commission's UER Order directed the New York State Energy Research and Development Authority (NYSERDA) and the IOUs 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

³ The UER is an online platform to provide streamlined public access to aggregated community-scale energy usage data.

⁴ 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.

requirements.⁵ Within the UER Order, the Commission required the IOUs to report monthly aggregated data twice per year, on January 31 and July 31, for the preceding six months.

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 Staff 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 UER refinements. On December 30, 2019, NYSERDA, in partnership with their UER consultant, Climate Action Associates, LLC (CAA), filed a UER Status Report.⁶ 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 later addressed by the Commission's August 12, 2021 Order Adopting Utility Energy Registry Modifications.⁷

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

⁵ Case 17-M-0315, Order Adopting Utility Energy Registry (issued April 20, 2018) (UER Order).

⁶ Case 17-M-0315, UER Status Report (filed December 30, 2019) (Status Report).

⁷ Case 17-M-0315, Order Adopting Utility Energy Registry Modifications (issued August 12, 2021) (UER Modification Order).

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.

During the initial period of the UER, the IOUs were compiling data by querying their enterprise systems to generate reports in accordance with the UER data protocol. These reports were submitted to NYSERDA and CAA, and then published to the UER platform.⁸ Since the adoption of the UER Modification Order, the UER Working Group developed the UER template generator, which allows the IOUs to create machine-readable import files which are then uploaded directly into the UER platform. The IOUs remain responsible for the quality and accuracy of the data 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 IOUs and other sources.⁹ The Commission reasoned that integrating such information in one location will enable DER providers, IOUs, energy consumers, 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 also provides New York's energy stakeholders with a platform that enables effective access and use of such

⁸ The UER Platform is available at: <https://utilityregistry.org/app/#/>.

⁹ Case 20-M-0082, Order Implementing an Integrated Energy Data Resource (issued February 11, 2021) (IEDR Order).

integrated energy customer data and energy system data. Additionally, the IEDR Order recognizes that several programs have been initiated relating to the various aspects of accessing and using customer energy data and system energy 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. The Commission reasoned that, in consideration of the time needed to implement IEDR capabilities, it was necessary and reasonable for the IOUs to maintain existing data access resources and to continue developing currently planned resource enhancements and additions that would provide stakeholders with access to data.

Within the IEDR Order, the Commission directed the IOUs to work with NYSERDA and Staff to implement a statewide IEDR. The IEDR Order also designated NYSERDA as the IEDR Program Sponsor responsible for defining, initiating, overseeing, and facilitating the IEDR Program on behalf of New York State.

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 pursues 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.

The IEDR's Initial Public Version and the subsequent Minimum Viable Product, were launched in March of 2023. The IEDR will continue to be improved as directed by the Commission

in Phase 2 of the program through mid-2026.¹⁰ On May 12, 2023, NYSERDA filed the IEDR Phase 2 Proposal 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.¹¹ 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. Furthermore, the Commission stated in the IEDR Order that the IEDR will enable entities that would like to perform their own data analytics and services by having access to the various data sources.

THE PROPOSAL

The purpose of the Staff Proposal is to seek Commission approval on the transitional and procedural processes required to eliminate the IOUs' UER reporting responsibilities once the IEDR can produce and publish aggregated community-scale energy usage data. By removing the IOUs' UER reporting responsibilities, the Commission will eliminate the need for duplicative utility-transferred energy usage data and reporting. The Proposal recommends that the Commission relieve the IOUs'

¹⁰ Case 20-M-0082, Order Addressing Integrated Energy Data Resource Matters (issued October 13, 2023) (IEDR Matters Order). The IEDR Matters Order clarified the Commission's intent that the IOUs directed to participate in the development of the IEDR will be required to share non-aggregated, non-anonymized customer energy usage data with the IEDR to support a range of use cases.

¹¹ Case 20-M-0082, Integrated Energy Data Resource Program Phase 2 Proposal Status Report (filed May 12, 2023) (IEDR Phase 2 Proposal).

UER compliance requirements, which include the aggregation and reporting of community-scale: (1) energy usage; (2) CCA opt-out eligible load; (3) ICAP tags; and (4) DER generation data, directly to the UER once the IEDR begins to publish community-scale energy usage data. As the IEDR is currently securely collecting customer energy usage data from the IOUs and will be capable of integrating and aggregating customer energy usage data on a community level to provide public access to 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.¹²

At present, the data that the IOUs publish to the UER are entered by the utility using machine readable templates. These templates assist the IOUs with their obligation to import files directly to the UER. The import files contain blank fields in which the IOUs enter their compiled data. To date, these data are available on the Open NY Data website, as well as the UER platform.¹³ During the transitional period, Staff proposes that the IOUs continue to report their data to NYSERDA, and that NYSERDA will remain responsible for collecting and providing public access to the data through Open NY. The data fields that the IOUs are currently responsible for producing in order to be compliant with UER data protocol requirements should remain in place during the transition to IEDR data hosting.

As the IEDR Phase 2 Proposal initially included a CCA Implementation use case that identifies similar data fields as to what would be needed to facilitate a community's

¹² The UER Data Protocol is available at: <https://utilityregistry.org/app/UER.New.York.Community.Data.Protocol.July.2023.pdf>.

¹³ Open NY is the award-winning initiative of policies, programs and tools that provide public access to digital data for collaboration and analysis. Available at: <https://data.ny.gov/>.

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,¹⁴ 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 Energy Information Association Residential, Commercial, and Industrial rate class maps.¹⁵

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. When all necessary customer energy usage data becomes available in the IEDR, and the IEDR provides a use case to integrate the community-scale energy usage data on the statewide centralized platform, NYSERDA would notify the IOUs to stop reporting their UER data protocol files directly to NYSERDA. The IEDR would then be responsible for producing and publishing the community-scale energy usage data, relieving the IOUs of their UER compliance requirements. The Proposal states that NYSERDA should be responsible for ensuring that all historical community level usage data, reported by IOUs over the years, be stored and accessible to the public via Open NY. Finally, Staff proposes that all stakeholder engagement activities related to Community Energy Planning use cases should be consistent with the IEDR stakeholder engagement process.

¹⁴ Staff recommends that the count of four accounts 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.

¹⁵ Energy Information Association maps are available at: <https://www.eia.gov/>.

This would 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.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rule Making (Notice) was published in the State Register on November 29, 2023 [SAPA No. 17-M-0315SP4]. The time for submission of comments pursuant to the SAPA notice expired on January 29, 2024. Comments were received from seven entities in response to the SAPA Notice. The comments are summarized in the following section based on topic areas and are discussed further below in relevant part.

COMMENTS

Utility-Provided Community-Scale Energy Usage Data

The Capital District Regional Planning Commission, Hudson Valley Regional Council, Adirondack North Country Association, Mohawk Valley Economic Development District, Genesee/Finger Lakes Regional Planning Council, and Adirondack North Country Association (collectively, the Regional Planning Organizations) individually filed joint comments agreeing with the Staff Proposal that IOUs should no longer be required to report to the UER if the IEDR has the data required to publish UER-style aggregations.

CAA also agrees there is no need for IOUs to continue to report directly to the UER at the point when the IEDR has the raw data necessary to make UER-style data. Until that point, CAA believes direct reporting should continue as the UER platform is automated and cost effective to manage. CAA

comments that "an ideal approach would be to have UER and IEDR collaborate to design a pathway for UER, acting as an outside entity, to engage and make data with IEDR."¹⁶

Proposed IEDR Process

In support of leveraging the IEDR and its exciting potential, the Regional Planning Organizations believe ratepayers are best served by strengthening and funding an IEDR associated energy planning working group to develop energy planning use cases which can be built on IEDR data. The Regional Planning Organizations foresee the data being served on IEDR's website, and/or within the UER, or produced as data feeds to regional or local dashboards. Further, the Regional Planning Organizations propose that, to make the IEDR most effective, the Commission should codify and fund operations of the energy planning working group, which would be responsible for developing energy planning use cases. The Regional Planning Organizations included within their comments an envisioned workplan, highlighting specific work areas.

CAA comments that the IEDR contains inherent conflicts of interests as the IEDR is funded in phases with concept proposals, then tasked to identify and develop use cases to demonstrate IEDR's value. CAA believes that this process causes conflicts of interest as the IEDR is not restraining itself to the coordination of curating customer and systems data. Instead, the IEDR is developing derivative products and services in the use case market itself, a market CAA has worked in for many years. CAA notes that there are many businesses, non-profits, and other governmental entities in the use case market interested in developing energy and greenhouse gas emissions' dashboards and related services. CAA strongly believes that, if

¹⁶ CAA comments, p. 3.

the IEDR can expand access to this use case market, it will create tremendous value for the State. CAA suggests that an ideal approach would be to have the UER and the IEDR collaborate and design a pathway for the UER, acting as an outside entity, to engage and leverage IEDR data.

LEGAL AUTHORITY

The Commission's authority derives from the New York State Public Service Law (PSL), through which numerous legislative powers are delegated to the Commission. Pursuant to PSL §5(1), the "jurisdiction, supervision, powers and duties" of the Commission extend to the "manufacture, conveying, transportation, sale or distribution of ... electricity." PSL §5(2) requires the Commission to "encourage all persons and corporations subject to its jurisdiction to formulate and carry out long-range programs, individually or cooperatively, for the performance of their public service responsibilities with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources."

PSL §66(2) provides that the Commission shall "examine or investigate the methods employed by [] persons, corporations and municipalities in manufacturing, distributing and supplying ... electricity ... and have power to order such reasonable improvements as will best promote the public interest, preserve the public health and protect those using such ... electricity" Further, PSL §65(1) provides the Commission with authority to ensure that "every electric corporation and every municipality shall furnish and provide such service, instrumentalities and facilities as shall be safe and adequate and, in all respects, just and reasonable."

The Commission also has authority to prescribe the "safe, efficient and adequate property, equipment and appliances thereafter to be used, maintained and operated for the security and accommodation of the public" whenever the Commission determines that the utility's existing equipment is "unsafe, inefficient or inadequate."¹⁷ PSL §66(3) further empowers the Commission to "[p]rescribe from time to time the efficiency of the electric supply system." PSL §4(1) also expressly provides the Commission with "all powers necessary or proper to enable [the Commission] to carry out the purposes of [the PSL]" including, without limitation, a guarantee to the public of safe and adequate service at just and reasonable rates,¹⁸ environmental stewardship, and the conservation of resources.¹⁹ Thus, the Commission may exercise this broad authority to direct regulatory standards to execute the provisions contained in the PSL. Additionally, the Commission has the authority to direct the treatment of DER by electric corporations.²⁰

DISCUSSION

Utility-Provided Community-Scale Energy Usage Data

Understanding that it would take time to implement IEDR capabilities, the IEDR Order stated that it would be necessary and reasonable for the IOUs to maintain existing data

¹⁷ PSL §66(5).

¹⁸ See International R. Co. v Public Service Com., 264 AD 506, 510 (1942).

¹⁹ PSL §5(2); see also Consolidated Edison Co. v Public Service Commission, 47 N.Y.2d 94 (1979) (overturned on other grounds) (describing the broad delegation of authority to the Commission and the Legislature's unqualified recognition of the importance of environmental stewardship and resource conservation in amending the PSL to include §5).

²⁰ PSL §§5(2), 66(1), 66(2), 66(3), 66-c, 66-j, and 74.

access resources and to continue developing currently planned resource enhancements and additions that would provide stakeholders with access to data. 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 transition of community-scale energy usage data to the IEDR's statewide platform is warranted. Therefore, the Commission, in agreement with all commenting parties, is eliminating the IOUs' UER reporting responsibilities once the IEDR can produce and publish aggregated community-scale energy usage data.

In response to CAA's comment pertaining to a conflict of interest, the Commission acknowledged in the IEDR Order that the IEDR would, in time, become the State's centralized data platform. Further, regarding their comment that a generic process be developed so that the UER can leverage the IEDR platform's data, the Commission agrees. As previously stated, the IEDR will enable entities to perform data analytics and services via access to IEDR's various data sources.²¹ Thus, entities interested in developing energy and greenhouse gas emissions' dashboards and related services, will have access to IEDR's data sources.

During the transitional period, the Commission is requiring the IOUs to continue to report their UER data to NYSERDA, as NYSERDA remains responsible for collecting and providing public access to data through Open NY. As of the effective date of this Order, and beginning with the January 2025 reporting requirement, the IOUs shall report all data fields for which the IOUs are currently responsible for

²¹ IEDR Order, p. 14.

producing in compliance with the UER data protocol directly to NYSERDA during the transition.

In recognition of the significant work that NYSERDA, the IOUs, and CAA have devoted over the years to provide streamlined access to anonymized aggregated community-level energy data, the Commission's intention of creating a statewide centralized platform is now in its Phase 2 development stage.²² Consequently, the transitional period shall commence with the issuance of this Order and the IOUs shall report their responsible data fields directly to NYSERDA.

Proposed IEDR Process

The Commission adopts the Proposal, noting that the IEDR should not be required to replicate the existing UER platform or UER protocol. Rather, the IEDR will implement a Community Energy Planning use case which includes community-scale energy usage data outputs that, like the community-level aggregated data accessible by means of the UER, are consistently used by municipalities for their community energy planning needs. As proposed by Staff, the community-scale energy usage data for the Community Energy Planning use case shall be calculated using a privacy screen based on a count of four accounts,²³ which is in line with the privacy screen and roll-up methodology previously adopted by the Commission for the UER.²⁴ The count of four accounts privacy screen should be used only

²² The IEDR is in the development stage of its Phase 2 use cases, including its community energy planning use cases.

²³ As clarified within the UER Modification Order, privacy should be screened against the number of accounts, not customers, as a single customer could have numerous accounts.

²⁴ Screen Residential, Commercial, Industrial, Non-Residential, and Total to ensure there are at least four accounts in each category; screen and publish Non-Residential (i.e., combined Commercial and Industrial) as priority, and only publish Commercial and Industrial separately if they both pass.

when community-scale energy usage data is constrained to the State's geospatial county, municipality, or, for New York City, zip code boundaries.

Further, the Data Access Framework Order adopted a statewide aggregated data set privacy screen of 4/50 and 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 a differentiated privacy screen shall be applied solely to that use case or application addressed, unless otherwise directed by the Commission.²⁵ As discussed in the Proposal, the IEDR will also be capable of using customer energy usage data 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. To ensure consistently with privacy screen applications, the Commission is clarifying in this Order that the statewide aggregated data set privacy screen of 4/50 shall be screened against the number of accounts, not customers, as a single customer could have numerous accounts. Furthermore, the Community Energy Planning use case, which includes community-scale energy usage data, shall provide data outputs categorized by service class aggregations of the Energy Information Administration's Residential, Commercial, and Industrial rate class maps.

²⁵ Case 20-M-0082, Order Adopting a Data Access Framework and Establishing Further Process (issued April 15, 2021) (Data Access Framework Order).

As reiterated in the IEDR Matters Order, the IOUs 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. As the Commission stated within the IEDR Order, the IEDR will collect, integrate, analyze, and manage a wide variety of standardized energy-related information from the State's electric and gas utilities. Therefore, the IEDR is not responsible for the quality and integrity of the data it receives from the IOUs. With that, after the data has been transferred and stored to the IEDR, the IEDR - as a data custodian - is responsible for ensuring the data is compiled and provided in conformance with Commission data access requirements.

Once the IEDR publishes the use case that integrates the community-scale energy usage data on the statewide centralized platform, NYSERDA is directed to notify the IOU(s) to stop reporting their UER reporting directly to NYSERDA, which at that time, concludes the IOU's UER compliance requirements.²⁶ The notification shall be filed with the Commission in Cases 17-M-0315 and 20-M-0082. NYSERDA will remain responsible for ensuring that all historical community-level usage data, reported by IOUs over the years, is stored and accessible to the public via Open NY.

Finally, all stakeholder engagement activities related to Community Energy Planning use cases shall be consistent with the IEDR stakeholder engagement process. As such, the Commission rejects the proposal by the Regional Planning

²⁶ In the instance when a complete set of customer energy usage data for a given utility is available in the IEDR, that given utility's UER compliance requirement is discontinued upon written notification from NYSERDA.

Organizations to fund stakeholders who choose to participate in the Community Energy Planning use cases development. With that, we encourage the Regional Planning Organizations to collaborate with the IEDR 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.²⁷

CONCLUSION

Over the past five years, the UER has been providing public access to aggregated monthly electric and natural gas consumption data, which enables communities to track energy performance over time and create localized energy planning strategies. The UER's ability to provide community-scale energy usage data in a convenient and readily available format has enabled the development and tracking of communities' energy and climate goals, all while contributing largely to New York State's clean energy targets. Therefore, the Commission finds that it is both reasonable and cost-effective to initiate the transitional processes at this time, as the IEDR is currently implementing the functional capabilities required to facilitate access to community-scale energy usage data within the statewide platform. This decision aligns with the Commission's policy to provide effective access of energy-related information in a single location.

The Commission orders:

1. The Department of Public Service Staff Proposal on the Transition of Utility Reported Community-Scale Energy Usage Data is adopted, as discussed in the body of this Order.

²⁷ <https://www.nyserda.ny.gov/All-Programs/Integrated-Energy-Data-Resource-Program/Use-Case-Development>.

2. Niagara Mohawk Power Corporation d/b/a National Grid, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, Inc., New York State Electric & Gas Corporation, and Rochester Gas and Electric Corporation shall, as of the effective date of this Order, discontinue reporting aggregated community data to the Utility Energy Registry and instead report all data fields for which these utilities are currently responsible for producing in compliance with the Utility Energy Registry data protocol directly to the New York State Energy Research and Development Authority until notified to stop pursuant to Ordering Clause No. 3.

3. The New York State Energy Research and Development Authority shall, once the Integrated Energy Data Resource publishes the use case that integrates the community-scale energy usage data on the statewide centralized platform, file one or more notifications with the Secretary to the Commission in Cases 17-M-0315 and 20-M-0082 notifying the individual utilities identified in Ordering Clause No. 2 to stop reporting their aggregated community data directly to the New York State Energy Research and Development Authority.

4. These proceedings are continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary