

# Meter Data Reporting Enhancement: Application Programming Interface (API)

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**BACWG/MTF**

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# Agenda

- **Meter Data Reporting Enhancement: Application Programming Interface (API)**
- **Existing SDX Functionality**
- **API Technical Information and NYISO Metering API User Guide**
  - Structure
  - Service-Level Content
  - Walk-through
- **API and DER Timeline**

# Meter Data Reporting through the API

- As part of the DER project, the NYISO is introducing an Application Programming Interface (API) functionality for the submission and retrieval of meter data
- A subset of meter data currently uploaded/downloaded using the existing SDX templates will be implemented through the API to support the following types of meter data:
  - Injection MWh
  - Withdrawal MWh
  - Demand Reduction MWh
- The API will be the required means of submission/retrieval of meter data for Aggregations
- The API may optionally be used for the submission/retrieval of Tie Line, non-Aggregation Generator, and Subzone meter data instead of the following SDX templates:
  - Upload and Download Template for Tie Line, Generator, and Subzone Data
  - Upload and Download Template for Dual Channel Generator
  - Download Template for Meter Authority Subzone Data

# Existing SDX Functionality

- All existing SDX functionality will remain in place for the upload/download of Tie Line, Generator, and Subzone meter data
- SDX will not support submission of meter data for Aggregations
- At a future date, the existing SDX functionality will be retired, allowing for the transition from SDX to the API tool for the existing Tie Line, Generator, and Subzone meter data

# API Technical Information and User Guide

# User Guide Purpose / Intended Audience

- The User Guide describes the details of how Market Participants and Meter Authorities will be able to interact with the NYISO Metering API
- The User Guide is meant to support those who are tasked with implementing NYISO Metering API interactions at a technical level, as well as provide informational details about the services to other business users

# User Guide Structure

- **Introduction**
- **Using the Metering API**
  - Network Protocols
  - Location of Metering API Service Endpoints
  - Authentication
  - Data Formatting
    - Numbers
    - Dates and Times
  - Metering Data Availability
  - HTTP Status Codes for Responses

# User Guide Structure - continued

## ■ Metering API Services

- Meter Data Submission
- Retrieval of Submitted Meter Data
- Retrieval of Calculated Subzone Load Summary
- Retrieval of Calculated Subzone Load Detail



# User Guide Service-Level Content

## ■ Request

- URL
- HTTP Action
- HTTP Headers
- URL Parameters (*for GET requests only*)
- Request Body Parameters (*for POST requests only*)

## ■ Request Examples

- HTTP Action and URL
- HTTP Headers
- Request Body (*for POST requests only*)

# User Guide Service-Level Content - continued

## ■ Response

- HTTP Headers
- Response Body Parameters (*for POST requests only*)

## ■ Response Examples

- HTTP Headers
- Response Body

# First Look at User Guide

- **Walk-through of User Guide (provided with the meeting materials)**
- **The Initial Draft of the User Guide is approximately 95% complete**
  - Request parameters and JSON data structures likely in their final forms
  - Common root for the Metering API is not yet finalized

# API and DER Timeline

- **January 21 BACWG:** Business and technical overview of API
- **February 4:** Stakeholder comments due to Debbie Eckels [DEckels@nyiso.com](mailto:DEckels@nyiso.com)
  - Stakeholder feasibility of preparing for API deployment Q4 2022
  - Questions regarding additional information necessary for Stakeholder implementation of API
- **February 18 BACWG:** Status of API, updates to User Guide (as needed)
- **March 21 BACWG:** Status of API, updates to User Guide (as needed)
- **July/August:** Provide Market Trial environment for testing to include:
  - Specific testing time frame – Targeted to begin July/August 2022 and be ongoing
  - Testing support materials – Market Trial materials to be provided in coming months
  - Process for questions and technical support
- **Q4 2022:** Deploy API as part of the DER deployment

*Additional Committee Meetings and/or API Information Sessions to be scheduled as necessary*

# Our Mission & Vision



## Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



## Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

# Questions?