# Welcome to Niagara Falls





How NYPA uses sound Asset Management Principles and Maximo to better Manage our Assets and Meet the Requirements of ISO 55001



## NYPAVISION 2030

#### STRATEGIC PRIORITIES



Preserve and enhance the value of our hydropower assets as a core source of carbon-free power and of flexibility and resilience as the state's grid evolves



Be the leading transmission developer, owner, and operator for New York State and its changing needs



Pioneer the path to decarbonization by acting as a test-bed for innovation while ensuring reliability, resilience, and affordability of the state's energy grid



Partner with our customers and the state to meet their energy goals in alignment with CLCPA<sup>1</sup> by providing clean and affordable energy along with innovative customer solutions



Repurpose the New York
Canal System for the
economic and recreational
benefit of New Yorkers while
driving operational
efficiency

#### **FOUNDATIONAL PILLARS**

Digitization



Environment, Social, and Governance



Diversity, Equity, and Inclusion



Enterprise Resilience



Resource Alignment





## What is Asset Management?

Asset Management - the coordinated activity of an organisation to realise value from assets

www.thelAM.org

# ASSET MANAGEMENT AT NYPA IS:

- Leveraging technology and data to better monitor asset performance
- Shared decision-making informed by data
- A focus on continual improvement
- Optimizing customer value

NYPA supports the ISO 55001 standard for generation and transmission

2014

NYPA's Strategic Vision established

Asset Management Priority set 2015

Organizational gap analysis completed

Roadmap created

2016

Strategic Asset Management Plan And Regional Asset Management Plans created

Initial Asset Management Projects completed

iSOC piloted

2017

Asset Management Objectives defined

iSOC expanded

**ASSET SAVVY** 

Issues · Actions · Results

**EMBED PROCESSES & SYSTEMATIC ASSET MANAGEMENT CULTURE** 

2018

Asset Management Policy and Governance established

Asset Management Plans continue to Be defined

Asset Savvy Communications campaign launched 2019

ISO 55001 Certification 2020 - 2021

Surveillance Audits

Continuous Improvement

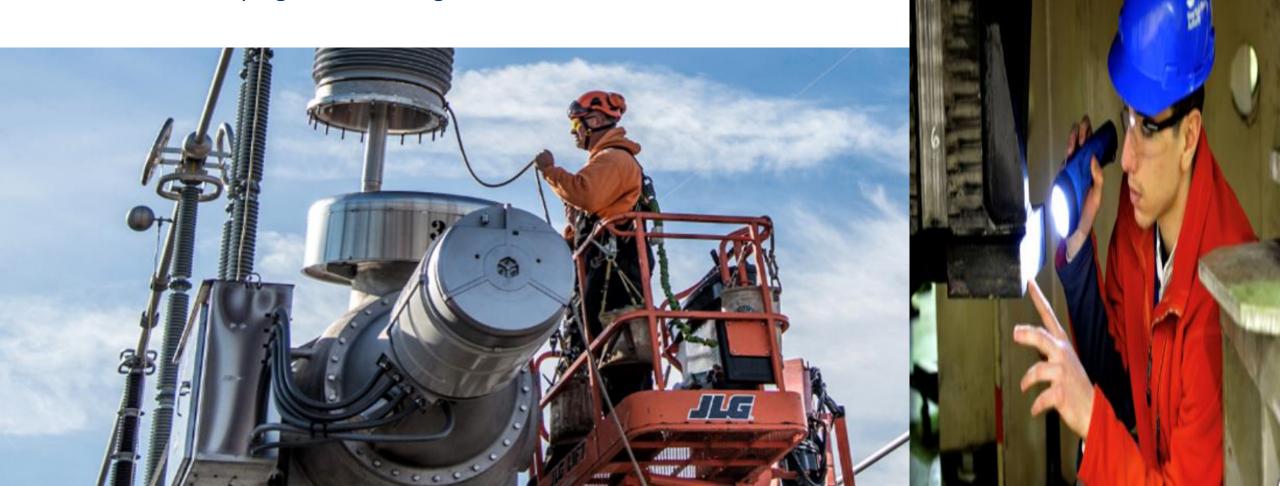
Covid Response using ISO framework

2022

ISO 55001 Recertification

## **Why Maximo**

Maximo allows us to store, organize, track, and evaluate large amounts of asset maintenance information, creating a defined workflow for both record keeping and informing smart business decisions



### **New Uses for Maximo**



#### **Street Lighting**

**Work Order Tracking** 

Job Plans

Crafts

**Purchase Requisitions** 



#### **Facilities**

Service Requests

Mail Room

**Printing Requests** 



## **Evolve New** York

Assets



#### **Compliance**

PRC / CIP Requests

## **Asset Information Strategy**



Support Document Title:
Asset Information Strategy

O-AMM-SD-002

Page: 1 of 61

#### **Title: Asset Information Strategy**

Document Type:

Support Document

Document Number:

O-AMM-SD-002

Revision Date:

9/7/2021

Content Owner:

Caputo, Leonard Director Asset Information

#### Purpose:

 Defines the Asset Information Strategy and requirements as well as the scope of asset information, consisting of structured and unstructured information.

#### Highlights:

- · Vision, principles and objectives
- Asset Information Scope
- Current state
- Asset Information Needs, Opportunities and expectations of stakeholders
- Future state
- Milestone activities that support the implementation roadmap

#### Subject to continual improvement:

V5 approved Sept 2021

## Managing our Data as an Asset

Treating data like physical assets to maximize value and drive better outcomes for NYPA and its customers



NYPA's Enterprise Data is growing exponentially
Nearly 2 Petabytes by 2020



NYPA's entire strategy & significant investments depend on data

Customer Digital Experience, Sensor Deployment,

Asset Performance management



Seamless interoperability is becoming the key to success

Enterprise Analytics Platform, Cloud-first Environments

**Data Governance** enables an organization to optimize, protect, and leverage all data as an enterprise asset. It is a system of accountability designed to enforce proper management of data assets and the performance of data functions. It succeeds by:

- Making data available and easily accessible Establishing consistent definition of data (especially when shared)
- Providing data transparency and traceability (knowing where the data came from) Trusting the quality of our data
- Keeping our data safe and secure Enabling automation of data processes (collection, transformation, reporting)

## **Quality Audit Program**

NYPA has established an organizational position for Maximo Data Quality

#### Responsibilities include:

- Defining quality audit procedures
- Performing quality audit and reports
- Remediation and follow-up as appropriate



NYPA has developed a **Data Quality (DQ) Visualizer** tool to support data quality audits

Iterations of the tool are being rolled out on a priority basis as follows:

- MVP 1 (minimum viable product) = Asset Register Currently in Use
- MVP 2a = Work Orders Q3 of 2022
- MVP X = Consideration for systems / information beyond Maximo and SAP

## Asset Information Systems Continual Improvement

**Asset Information Systems Governance** 

#### NY POWER AUTHORITY

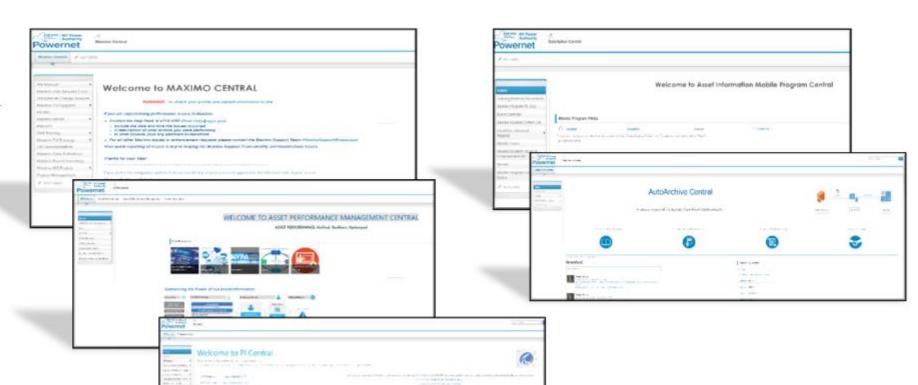
EXELE SOFTWARE AND CONSULTING SERVICES

PI SYSTEM CONSULTING SERVICES



#### II. Summary of Proposed Services

In response to the NY Power Authority's requirement for implementing a consistent and best practice approach to the usage of its PI System, Exele is prepared to provide the consultation to help define an enterprise-wide PI System solution and create the accompanying governance structure (policies, procedures, and supporting process flowcharts).



## **Asset Maintenance Manual**

Type	Document No. ↑	Rev No.	Title
Z	O-AMM-20-002	2	Lifecycle Maintenace of Asset Maintenance Management Procedures
Z	O-AMM-20-003	2	Maintenance Programs
<b>7</b>	O-AMM-20-004	8	Work Order (WO) Planning
<b>7</b>	O-AMM-20-005	2	Maintenance Scheduling Requirements
<u></u>	O-AMM-20-006	6	Planned & Forced Outage Maintenance Scheduling
Z	O-AMM-20-007	3	Asset Creation and Disposition
Z	O-AMM-20-008	4	Failure Analysis
<b>7</b>	O-AMM-20-009	2	Process Audits
Z	O-AMM-20-010	4	Measurement and Test Equipment (M&TE)
Z	O-AMM-20-011	4	Good Maintenance Work Practices
Z	O-AMM-20-012	4	Tool and Equipment Control
7	O-AMM-20-013	2	Item Creation and Disposition
<u></u>	O-AMM-20-014	3	Asset Performance Improvement Program
<b></b>	O-AMM-20-016	3	Project Turnover Procedure
Z	O-AMM-SD-004	1	Utility Operations Critical Infrastructure Protection (CIP A
Z	O-AMM-SD-005	1	Critical Infrastructure Protection (CIP) Requests and Work Or
Z	O-AMM-SD-007	1	Asset Register Standard
Z	O-AMM-SD-008	2	Failure Reporting Standard
<u></u>	O-AMM-SD-009	2	Job Plan Standard



Procedure Title:
Maintenance Programs

Procedure Number: O-AMM-20-003

1 of 27

#### **Title: Maintenance Programs**

Document Type: Procedure

Document Number: O-AMM-20-003

Revision Date: 9/22/2021

Final Approver: Dasûva, Rícardo

VP Strategic Operations

Content Owner: Caputo, Leonard

Director Asset Information

## **Asset Information Training & Certification**

**Asset Information Systems Training** 

Asset Information Governance Training (AMM)

**Asset Work Management Committee** 

**Biannual Planners Conferences** 

MUWG Planner Scheduler Certification Training (30)



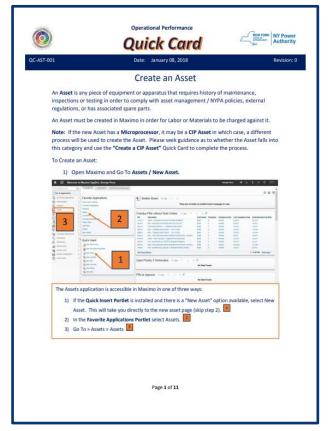
Institute of Asset Management Certifications

- Certificate (35)
- Diploma (7)



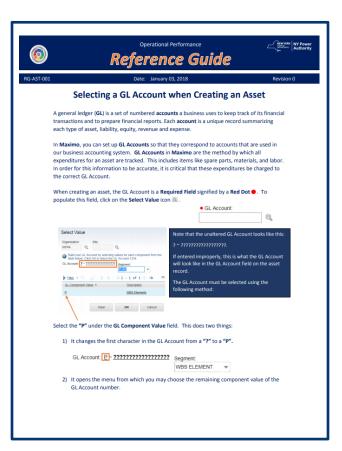


## **Training**

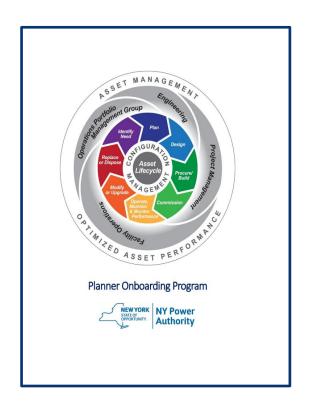








## **Set Up For Success**







Asset Work Management Committee











