

Strengthening Our Asset Management: Good asset management is fundamental to the success of virtually every organization, from the smallest enterprises to large utilities. Whether it's equipment, financial, personnel or other resources, the assets are the means of achieving the aims of those organizations. For the New York Power Authority (NYPA), that's providing clean, low-cost electricity in support of New York's economic growth and contributing to a robust and innovative state energy infrastructure, as part of the hallmarks of Governor Cuomo's leadership.

With more than \$3 billion in generation and transmission assets, NYPA has always recognized the importance of ensuring its facilities are well maintained and perform to their optimum capability. Accordingly, asset management is one of the six major initiatives in our Strategic Vision 2020 plan, which provides for a comprehensive centralized repository of asset information. The goal: to strengthen maintenance, operation and planning processes for equipment assets throughout their life cycle.

"It's all about being more efficient with our maintenance activities and adopting solutions that best meet the needs of our organization and the customers that we serve," said **Ricardo DaSilva, director, Strategic Operations**. "This includes determinations on when to replace aging equipment as we've done at various times in undertaking major equipment overhauls, including life extension and modernization projects, for our generation and transmission assets."

In April 2015, NYPA's Operational Performance and Information Technology departments completed the integration of Maximo 7.5, an IBM software system for tracking the maintenance history of generation and transmission equipment. Now, we're building upon the success of that rollout with plans to integrate the program with smart tablets for use in the field by our transmission linemen.

Further, we recently began integrating the software with other classifications of assets, starting with Facilities Management operations at our White Plains office (WPO), and are looking at the possibility of incorporating it into Fleet Operations for monitoring our nearly 1,000 vehicles.

"To have a truly successful asset management system, you want to have one platform for a holistic approach that fosters information flows across departments," said **Agnes Harris, NYPA vice president, Operational Performance**. "That helps to avoid information silos, promoting better decision-making in our management of assets from the vantage point of having a more complete picture of the various factors affecting that equipment."

A key element of a single software system is the standardization of terms on how items are referred to. That allows for easier retrieval of information in our carrying out of tasks such as preventive maintenance, repairs and replacing parts.

Maximo 7.5 is an upgrade over an earlier version—5.2—which NYPA had used since 2006. The 7.5 edition provides for easier use in entering and retrieving data and navigating the asset

management program. The upgrade is also accommodating the shift to applying the software more broadly within the organization.

“The Maximo 7.5 upgrade was a testament to NYPA teamwork,” said **Len Caputo, program manager, Asset Management**. “It constituted a multiyear effort involving multiple groups in Operations and IT. The team was committed to bringing Maximo to the next level.”

“Operations and IT continue to work together to maximize Maximo, to expand its functionality and realize the system’s full potential across NYPA,” said **Maria He, manager, operations applications, IT**.

The incorporation of Maximo 7.5 by Facilities Management has made possible the group’s introduction of electronic forms through an employee Intranet portal for responding to service requests at the WPO and tracking and categorizing the work. This includes everything from light fixture replacements to work place reconfigurations, from temperature adjustments to garage access.

“The Maximo platform is going to be a big help in supporting the ever-increasing activities of Facilities Management,” said **Juan Cazorla, assistant facility manager, NYPA**. “By memorializing the service requests that we receive, we can more systematically see where our efforts are going and direct the proper resources to them.”

Fleet Operations, which now uses another asset management system called Asset Works, is in the process of doing a gap analysis for determining how Maximo 7.5 might work as a substitute.

“We recognize the benefits of our vehicle data being part of an enterprise-wide asset management system, so we’re doing our due diligence in confirming all of the software functionalities for proceeding with this opportunity, which we expect will provide us with additional capabilities,” said **Bruce Shoener, NYPA director of Fleet Operations**.

More broadly speaking, NYPA’s dedication to becoming a best-in-class asset management organization is reflected by its application of approaches that are aligned with principles of the International Standards Organization (ISO). Those standards, known as ISO 55000, will further our predictive capability for when equipment maintenance is needed and are consistent with the asset management goals of our Strategic Vision, as well as the plan’s other strategic initiatives, such as Smart Generation and Transmission, and Customer Solutions.

The utility industry is in the midst of major technological and regulatory changes heralding a greater role for distributed on-site generation and two-way and multi-way power flows on the grid. Customers will have more choices for managing their economical electricity use with clean sources of power and enhancing service reliability. At the same time, there will be new demands on generation and transmission assets that NYPA and other utilities must anticipate in considering their asset management approaches.

With that in mind, we're working to establish a roadmap for identifying the additional actions that are necessary to be certified under ISO 55000.

“The higher standards will lead to improvements in our capabilities to analyze and act on asset information and further ensure employees have the proper training, competencies and experiences in carrying out the necessary actions,” said **Gary Proulx, NYPA asset strategy manager**.

“The bar is set extremely high for organizations seeking the ISO certification,” said DaSilva. “In fact, at the current juncture, no electric utility in the U.S. has received the designation. But that makes us no less committed to achieve this, with **NYPA President Gil Quiniones, Chief Operating Officer Joe Kessler** and other executive managers and the Authority's trustees firmly behind this effort.”