

Infrastructure Master Plan Update

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> Budget & Priorities Working Group September 8, 2010



History

- The Carman Road, Guilderland Power Control Center (PCC) was built in 1969 to support New York Power Pool operations (40 years old)
- Minor renovations have been performed to address office space needs, incremental computer room additions, and physical security concerns; control room technology has not been significantly updated in 40 years
- In 2005, the NYISO purchased the Krey Blvd. building to consolidate administrative functions from three (3) leased facilities; power control functions were not addressed at that time
 - Consolidation of power control functions onto a single campus was identified as a subsequent phase when selecting the Krey Blvd. property
- Multiple infrastructure repairs and needed upgrades have been identified in recent years, but deferred due to budget constraints and other factors
 - PCC Renovation Project was prioritized and approved as part of 2009 budget, but deferred due inability to procure long-term financing



Project Background

- In October 2009, NYISO Market Participants approved a proposal to proceed with a series of necessary improvements to the NYISO facilities.
- The NYISO reached terms with a consortium of banks to borrow up to \$50M for the necessary improvements. The terms of the financing would moderate the impact on rates by spreading the payments out over 20 years.
- In December 2009, the NYISO filed a petition with the NYS PSC for approval to close on the financing agreement.
- The NYISO has engaged an architect and construction management firm to produce the necessary construction drawings and procure the municipal approvals required to meet the loan terms. Additionally, certain construction activities have been started in order to meet the schedule.
- The NYS PSC has not acted on the NYISO financing petition; the loan commitment expired on June 30, 2010.



Current State of Facility Infrastructure

- Renovation and expansion is needed to address current facility deficiencies and prepare for evolving business changes
 - Some needs are more time sensitive
- Certain deficiencies in existing facility infrastructure are imposing risk to reliability and need to be addressed now
 - Replacement of Carman Road data center
 - Replacement of Carman Road emergency generation
- Changes in NYISO business requirements will require expansion to control room in order to meet reliability and operational needs
 - Control room space
 - Control room technology
 - Adequacy of back-up facilities
- The NYISO has commissioned a set of studies to review assumptions, requirements, and current state of facilities, and to provide assessment and recommendations



Project Plans for 2011

- The 2011 NYISO budget includes improvements necessary to address facility deficiencies that could impact reliability, as well as planning activities to support future requirements
- Carman Road Facility Improvements
 - Completion of site work, construction, interconnection, and commissioning of Carman Road emergency generators
 - Progress towards completion of site work, construction, interior infrastructure, and commissioning of Carman Road data center
- Krey Blvd. Facility Improvements
 - Finalization of design and development of construction drawings for Krey Blvd. power control center expansion



Project Plans for 2011(Cont.)

 The 2011 NYISO budget does NOT include funds for certain improvements that have been identified as part of the Infrastructure Master Plan

Carman Road Facility Improvements

- Control room upgrades to provide improved visualization technology in support of enhanced situational awareness
- Control room space expansion to provide for new business requirements / functions
- Renovation of existing computer room space or basement office environment impacted by new electrical / mechanical installations
- Krey Blvd. Facility Improvements
 - Space or technology upgrades for back-up control center functions
 - Implementation of redundant commercial power source



2011 Budget Estimates

Carman Road Improvements

Site Work Building Shell, Exterior Construction Interior Construction / Fit-out Subtotal – Carman Road

Krey Blvd. Improvements Design for new Control Center Subtotal – Krey. Blvd.

2011 Project Total

\$ 1,200,000
\$ 1,300,000
\$ 8,400,000
\$ 10,900,000

\$ 1,200,000 \$ 1,200,000

\$12,100,000



Next Steps

- Continue discussions with Market Participants on requirements for new control center and timing of project
- Finalize studies to assess viability of existing data center and adequacy of new control center
- Finalize quantification of efficiency gains to be realized from organizational consolidation on a single campus and development of a project Cost Benefit Analysis
- Presentation of findings to Market Participants and incorporation of project plans into future budget strategies



Current Project Timeline

- September 2010 Finalization of studies to assess viability and adequacy of existing data center and back-up control room
- October 2010 Completion of Cost Benefit Analysis to review efficiency gain opportunities from organizational consolidation onto a single site
- December 2010 Completion of Carman Road design activities
- December 2010 Initiation of construction activities for new generators and data center at Carman Road
- 4Q2010 Review of repackaged Krey Blvd. proposal with Market Participants
- January 2011 Restarting of design activities for Krey Blvd. improvements
- 2Q2011 Targeted finalization of project scope and schedule