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| <b>Project ID/Project Name:</b>   | <b>A649 / Oracle 9i Upgrades</b> |
| <b>Description:</b><br>Migration of NYISO databases to version 9i of Oracle.  |                                  |
| <b>Business Objective:</b><br>Upgrade NYISO databases to version 9i of Oracle which is the current and supported version of Oracle  |                                  |
| <b>Scope and Deliverables:</b><br>(1) Phase 1 – Upgrade Market Information System (MIS) and Autosys Databases. This includes the migration of the databases to a new hardware platform running a new Operating System. The Autosys application will also be upgraded to the latest version. DEPLOYED 3/9/2003.<br>(2) Phase 2 - Upgrade of Oracle Financials as well as remaining databases (Load Forecast, Market Monitoring Relational Database (MMRD), Billing & Accounting System (BAS)) to version 9i of Oracle. This upgrade is tentatively scheduled for after the summer deployments. |                                  |
| <b>Deployment:</b> Phase 2: TBD   |                                  |

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| <b>Project ID/Project Name:</b>  | <b>A583 / Billing System Improvements – Phase 2</b> |
| <b>Description:</b><br>Creation of applications that will facilitate the data retrieval process for Market Participants and NYISO internal staff.  |   |
| <b>Business Objective:</b><br>This project will enable Market Participants to replace their FTP file loads with new upload/download templates and allow visibility to data via the Web. Access to this information will empower Market Participants to view and correct data before the bill cycle is started. |   |
| <b>Scope and Deliverables:</b><br>(1) Provide a Web enabled application that will allow Market Participants to upload and download data, view data online, verify Tie Line, Generation, and Load data.   |   |
| <b>Deployment:</b> 04/29/03 - 06/24/03   |   |

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| <b>Project ID/Project Name:</b>  | <b>A623 / New Loss Calculation</b> |
| <b>Description:</b><br>At the request of Market Participants, the New Loss project was developed to modify the manner in which Loss calculations are computed. The goal of this effort is to more accurately account for transmission losses on the high voltage system. This project has applied a new calculation for losses based on Economic Dispatch Control (EDC) area versus New York Control (NYCA) area. The intent is to improve the loss calculation in granularity so that each EDC area has it's own loss factor. |                                    |
| <b>Business Objective:</b><br>This is an interim method to provide a more accurate Loss calculation at the sub zone level. The ultimate solution will be the State Estimator/Real-Time Dispatcher power flow solution that will provide directly computed losses at the sub zone level. This project has delivered improved accuracy.  |                                    |
| <b>Scope and Deliverables:</b><br>(1) Define the EDC areas to 22 sub zones and provide more detailed factors by the sub zone for loss calculation.<br>(2) Update the Batch and Billing software to accommodate the new methodology.  |                                    |
| <b>Deployment:</b> Deployed 03/25/03   |                                    |

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| <b>Project ID/ Project Name:</b>  | <b>A614 / Day Ahead Demand Response Program (DADRP) Enhancements</b> |
| <b>Description:</b><br>This project will expand participation in the Day-Ahead Demand Response Program by allowing Demand Response Providers to submit load reduction bids.   |  |
| <b>Business Objective:</b><br>This program will offer greater flexibility to market participants to bid day-ahead price responsive load reduction into the Day-Ahead Market (DAM). This will reduce the financial risk for load serving entities (LSEs), increase competition, and restrain prices and price volatility in the DAM. The increased availability of price responsive load is essential to the creation of effective competitive energy markets in New York. |  |
| <b>Scope and Deliverables:</b><br>(1) Modify the Market Information System (MIS) and Billing and Accounting System (BAS) to accommodate the new class of service providers.   |  |
| <b>Deployment:</b> 06/28/03   |  |

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| <b>Project ID/Project Name:</b>  | <b>A636 / 85 / 15 Rate Schedule Split</b> |
| <b>Description:</b><br>This project supports the FERC approved revisions to the Schedule 1 funding mechanism for both the Open Access Transmission Tariff (OATT) and the Market Administration and Control Area Services Tariff (Services Tariff) which reallocates responsibility for costs. 85 percent of costs are allocated to Loads and other withdrawals of energy from the New York Control Area (NYCA), and 15 percent to all injections (i.e., generators and other suppliers, supplying energy into the NYCA Locational-Based Marginal Price (LBMP) market). |   |
| <b>Business Objective:</b><br>To share the NY ISO operating costs between the Load Serving Entities (LSEs) and the Generators as prescribed in FERC rulings and the Management Committee motion.   |   |
| <b>Scope and Deliverables:</b><br>(1) Provide an automated solution that will allow Schedule 1 costs to be allocated to Load Serving Entities (LSEs) and the Generators.   |   |
| <b>Deployment:</b> 06/24/03  |   |

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| <b>Project ID/Project Name:</b>   | <b>A668 / Scheduling and Pricing Non-Competitive Proxy Interfaces</b> |
| <b>Description:</b><br>The purpose of this project is to eliminate the price distortion that occurs at the external proxy buses. New proxy bus pricing will be incorporated and determined in MIS and a Non-Competitive Proxy Bus Market Monitoring Form will be created.   |   |
| <b>Business Objective:</b><br>Significant market price distortions can occur at the HQ external proxy bus in the absence of competitive import or export offers. The result of such bidding behavior has contributed significantly to uplift. The objective of this project will be to be to eliminate the price distortion that occurs at the external proxy buses when there is an absence of competitive alternative transactions. |   |
| <b>Scope and Deliverables:</b><br>(1) New settlement rules added to Market Information System (MIS) to define the criteria to be used to identify a non-competitive interface and the prices which will be used to settle real-time positions at the proxy bus.<br>(2) MIS to produce forms for Market Monitoring. MIS will capture and report those occasions when the   |   |

new settlement rules were active at the applicable proxy bus and applied to net real-time schedules.

**Deployment:** 05/28/03

**Project ID/Project Name:** **A667 / Scarcity Pricing and Shadow Price Adder**

**Description:** Create a scarcity-pricing module.

**Business Objective:**

The objective of the project will be to implement reserve shortage cost pricing and allow Emergency Demand Response Program (EDRP) resources and Special Case Resources (SCR) to set energy prices in real-time.

**Scope and Deliverables:**

- (1) Phase 1 - Component to calculate special prices during SCR/EDRP events
- (2) Phase 2 - Component to calculate special prices during a reserve-shortage. Under the appropriate conditions these components will generate an alternate input for the price calculation module (LBMPC) at the frequency of the SCD execution.

**Deployment:** 06/10/03

**Project ID/Project Name:** **A637 / GT Management Enhancements II**

**Description:**

The GT Management Enhancements II project will address the two remaining deliverables of the A633/A637 OOM for Reserves in Hybrid Dispatch / GT Management Enhancements I. In addition to these deliverables, this project is tentatively scheduled to address the issue of Persistent Dragging

**Business Objective:**

To enhance the efficiency and usability of both the Market Information System (MIS) OOM package and the GT management functionality of the mainframe Energy Management System (EMS).

The goal is to:

- (1) Handle GT Starts and Stops by SCD to be more reflective of real time situations.
- (2) Have more consistent and appropriate Real-Time dispatch, and therefore better R/T prices.

**Scope and Deliverables:**

- (1) Update MIS Out of Merit Generation (OOM) package, MIS Business Rules, MIS database rules and the EMS/SCD to correctly reflect real time situations.

**Deployment:** TBD

**Project ID/Project Name:** **A620 / AMP IV Including Start Up and Mingen Mitigation**

**Description:**

To provide controls for start-up and minimum generation bids and in-city Day Ahead Market (DAM) mitigation.

**Business Objective:**

To develop tests and processes to mitigate situations where start-up and minimum generation bid parameters may be used to economically withhold resources from the energy market with a subsequent material energy price impact.

**Scope and Deliverables:**

- (1) Revision to the Market Information System (MIS) to include start-up and minimum generation bids where a comparison of “bid to reference” will be performed.
- (2) Revision to the Security Constrained Unit Commitment (SCUC) system where bid impact will be determined.
- (3) Create software to develop end maintain start up and minimum generation cost references.

**Deployment:** TBD

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| <b>Project ID/Project Name:</b>  | <b>A619 / TransEnergie Long Island Sound Cable</b>                             |
| <b>Description:</b><br>To develop the NYISO systems that will be required for commercial operation of the Cross Sound Cable (CSC). This is a two-phase project – Phase 1 is to model the DC line as a generator and only KeySpan can bid. Phase 2 will model the DC line as a separate control area.   |  |
| <b>Business Objective:</b><br>TransEnergie is installing a DC connection between LIPA and NE across LI Sound. This project will require effort by several areas of the NYISO.  |  |
| <b>Scope and Deliverables:</b><br>This project will have the following deliverables:<br><ol style="list-style-type: none"> <li>(1) Creation of an additional external proxy bus.</li> <li>(2) Creation of a process to pull CSC transactions approved by ISO-NE from their OASIS (reservations and/or schedules).</li> <li>(3) Transactions with ISO-NE will be uniquely identified as to whether they are scheduled at the ISO-NE proxy or at the CSC proxy.</li> <li>(4) Installation of required metering and sign verification.</li> <li>(5) Modification of NYISO interchange calculations and any affected loads, loss breakdown factors and inadvertent calculations.</li> <li>(6) Modification of all affected dispatcher displays.</li> <li>(7) Modification of system models.</li> <li>(8) Modification of PTS load integrations.</li> <li>(9) Revision to <i>NYISO Facilities Requiring Coordination and Notification</i> in NYISO Operating Manuals.</li> <li>(10) Definition of any new security issues.</li> <li>(11) Modification of the TCC auction model power flow.</li> </ol> |  |
| <b>Deployment:</b> 06/01/04  |  |
| <b>Project ID/Project Name:</b>  | <b>A541 / Transmission Congestion Contract (TCC) Online Auction Automation</b> |
| <b>Description:</b> Develop user interfaces that can support online data entry and reporting of TCC auction information and provide auction data to the auction analysis products.   |  |
| <b>Business Objective:</b><br><ol style="list-style-type: none"> <li>(1) To increase external customer satisfaction by improving the accuracy of the TCC auction process and providing improved reporting for users of TCC data.</li> <li>(2) To improve the efficiency of the auction process, thus reducing the number of hours required by NYISO Resource Reliability (RR) resources that administer the TCC auctions.</li> </ol>   |  |
| <b>Scope and Deliverables:</b><br><ol style="list-style-type: none"> <li>(1) Automate the entry of bids and offers to Optimal Power Flow (OPF).</li> <li>(2) Provide a web interface for electronic entry and modification of bids by Market Participants.</li> <li>(3) Automate the daily update of auction results to TCC database used by Billing &amp; Accounting System (BAS).</li> <li>(4) Automate the update for invoice preparation..</li> <li>(5) Provide a web interface for viewing and downloading data.</li> <li>(6) System Security.</li> </ol>   |  |
| <b>Deployment:</b> TBD   |  |

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| <b>Project ID/Project Name:</b>   | <b>A543 / Unforced Capacity (UCAP) Market Automation</b> |
| <b>Description:</b> Create software to automate the UCAP/ICAP processes including auctions.. The project will provide a web-enabled interface to facilitate online bidding, logging, bid validation and posting in support of the Installed Capacity (ICAP) auction process.  |  |
| <b>Business Objective:</b><br>(1) To increase external customer satisfaction by providing an automated and secure web enabled system for administering the UCAP market.<br>(2) To increase productivity of NYISO staff by reducing the manual effort required.<br>(3) To improve the quality of the UCAP market process by decreasing the likelihood of data errors.  |  |
| <b>Scope and Deliverables:</b><br>(1) Automation of: <ul style="list-style-type: none"> <li>- Credit system interface.</li> <li>- Auction model scheduling.</li> <li>- Load shift processing.</li> <li>- Notification of results to Market Participants.</li> <li>- Standard report generation.</li> </ul> (2) Procedures to ensure data security.<br>(3) Conformance to government and auditing requirements.<br>(4) Access to data and data analysis tools. |  |
| <b>Deployment:</b> TBD  |  |

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| <b>Project ID/Project Name:</b>  | <b>A564 / Bi-Directional Modeling of Generation</b> |
| <b>Description:</b><br>Change the logic in appropriate systems to recognize Niagara generation and control when the combined plants are measuring negative (-).  |   |
| <b>Business Objective:</b><br>Defaulting Niagara negative generation to zero in the Billing & Accounting System (BAS) has the effect of increasing load allocated to Load Serving Entities (LSEs) within the NM West sub-zone. As a result, these LSEs are overbilled for load and associated ancillary services. Accurately modeling and balancing Niagara will result in more equitable billings to all MPs located within the NM West sub-zone. |   |
| <b>Scope and Deliverables:</b><br>(1) To provide proper billing for regulation and energy when unit is operating <0 MW output. Do not default to zero.<br>(2) To correctly balance Niagara when the net Niagara generation schedule is negative.   |   |
| <b>Deployment:</b> TBD   |   |

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| <b>Project ID/Project Name:</b>  | <b>A630 / Mechanize Grid Account Support for Voltage Support</b> |
| <b>Description:</b><br>Mechanize the Voltage Support processes within Grid Accounting to support Billing. To simplify, and automate, where possible, entry of data into the Billing & Accounting System (BAS) that is required for computation of payments to Market Participants qualified to supply voltage support.         |  |
| <b>Business Objective:</b><br>Currently, calculation and payment of voltage support service is a manual and time-consuming process. Since it is a manual process, it is also prone to error. Completion of this project would free up NYISO resources and reduce the risk of making erroneous payments to Market Participants. |  |
| <b>Scope and Deliverables:</b>   |  |



- (1) Provide the ability to transfer reactive test and/or test data into the BAS for computation of payments to generators qualified to supply voltage.
- (2) Provide a means to enter the annual MVar rate.
- (3) Provide a means for BAS to identify units with ICAP contracts.
- (4) Provide a means to identify which organization receives payment for a given generator’s voltage payments.
- (5) Provide a means to identify units eligible for lost opportunity cost payments.
- (6) Provide a means to identify units that fail to provide for voltage support as required.

**Deployment:** TBD

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| <b>Project ID/Project Name:</b>  | <b>A624 / Twelve Month Final Bill</b> |
| <b>Description:</b><br>Make software and procedural changes to meet Market Participants requirements for reducing the current Final Bill cycle from 24 months to 12 months.  |                                       |
| <b>Business Objective:</b><br>Make appropriate software and process changes that will allow Market Participants to analyze their bills with 99+ accuracy at the 12-month period.   |                                       |
| <b>Scope and Deliverables:</b><br><ol style="list-style-type: none"> <li>(1) Eliminate the ConEd state estimator and replace with Con Ed Super Zone calculations.</li> <li>(2) Provide dates on the HrLoad Files to indicate when the data has been changed.</li> <li>(3) Run the AdHoc HrLoad Files on a weekly basis.</li> </ol> |                                       |
| <b>Deployment:</b> TBD   |                                       |

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| <b>Project ID/Project Name:</b>  | <b>A647 / Station Power Accounting</b> |
| <b>Description:</b><br>Develop and modify NYISO systems to address station power in the Services Tariff.   |  |
| <b>Business Objective:</b><br>Develop and modify NYISO systems to account for station power as per the NYISO compliance filing due on 8/13/02. With the ability to self-supply (effectively purchasing station power at LBMP) generators should realize substantial savings in station service costs.  |  |
| <b>Scope and Deliverables:</b><br><ol style="list-style-type: none"> <li>(1) Treat and bill consumed station power as other loads are treated and billed.</li> <li>(2) Have monthly netting determine what amount of station power will be considered as retail load and not subject to the NYISO Open Access Transmission Tariff (OATT).</li> <li>(3) Amounts paid during the month for station power considered as retail load will be rebated to the generator owner and charged to the host Transmission Owner (TO) subsequent to the billable month.</li> </ol> |  |
| <b>Deployment:</b> TBD   |  |

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| <b>Project ID/Project Name:</b>   | <b>A628 / Inter-ISO Congestion Management Settlements</b> |
| <b>Description:</b><br>Develop an Interregional Congestion Management Pilot Program (Compliance with FERC directives).  |   |
| <b>Business Objective:</b><br>The pilot program is intended to facilitate the redispatch of generation to alleviate transmission congestion on selected pathways of the transmission systems operated by the ISO and PJM interconnection. The Pilot Program procedures will be used solely when, in the exercise of Good Utility Practice, the ISO or PJM determines that the redispatch of generation units on the other’s transmission system would reduce or eliminate the need to resort to Transmission Loading Relief or other transmission related emergency procedures.   |   |
| <b>Scope and Deliverables:</b><br><ul style="list-style-type: none"> <li>(1) In conjunction with PJM, identify potential transmission operating constraints that could result in the need to use Transmission Loading Relief or other emergency procedures in order to alleviate the transmission constraints.</li> <li>(2) ISO and PJM to identify generation units on the other’s system, the redispatch of which would eliminate the identified transmission constraints.</li> <li>(3) Modify operating procedures to include; the redispatch of the identified PJM generators as a possibility for alleviating one of the identified NY operating constraints; the actions necessary when PJM requests redispatch of one of the identified NYCA generators to alleviate one of the identified NY operating constraints.</li> <li>(4) Modify MIS OOM package to include a new Out of Merit Generation (OOM) type.</li> <li>(5) The credit for the Pilot Program redispatch, triggered by the new OOM type, should replace the standard Real-Time Bid Production Cost Guarantee (R/T BPCG). Modify BAS to calculate the credit to the redispatched generator.</li> <li>(6) Modify Power Supplier section of Billing statements to include fields necessary to reconcile credits/charges resulting from participation in the Pilot Program.</li> <li>(7) A Billing mechanism to allow the NYISO to charge PJM for the cost of the generator redispatch needs to be developed.</li> </ul> |   |
| <b>Deployment:</b> TBD  |   |

*Strategic Development Projects Begin on the Next Page*



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| <b>Project ID/Project Name:</b>   | <b>A573 / SMD 2 Market Systems Implementation</b> |
| <b>Description:</b><br>This project represents the work necessary to modify and/or replace existing systems as needed to work with the new Supervisory Control and Data Acquisition (SCADA) / Energy Management System (EMS) / Business Management System (BMS) being delivered by ABB.   |   |
| <b>Business Objective:</b><br>The objectives of the SMD 2.0 projects (A573 and A574) are as follows:<br>(1) To support compliance with FERC initiatives to standardize market rules.<br>(2) To build upon NYISO overall market design and strengthen the Day-Ahead Market (DAM).<br>(3) To eliminate known limitations and inefficiencies existing in the Real-Time Market.<br>(4) To provide full redundancy and seamless fail over capabilities for greater security and reliability.<br>(5) To address data transparency as demanded by market participants.<br>(6) To integrate State Estimator for Real-Time Scheduling (RTS) solution integrity.<br>(7) To increase supportability for maintenance and responsiveness for enhancements. |   |
| <b>Scope and Deliverables:</b><br>(1) Modify the Market Information System (MIS) to work with the new SCADA / EMS / BMS.<br>(2) Modify the Billing and Accounting System (BAS) to work with the new SCADA, / EMS / BMS.<br>(3) Modify and/or replace the Market Monitoring tools to work with the new SCADA / EMS / BMS.<br>(4) Replace the Load Forecaster to support the new SCADA / EMS / BMS.<br>(5) Replace the mainframe programs to support the new SCADA / EMS / BMS.   |   |
| <b>Deployment:</b> Factory Acceptance Test – 09/15/03<br>Market Trials – 11/01/03<br>System Cutover – 04/01/04  |   |

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| <b>Project ID/Project Name:</b>   | <b>A574 / SMD 2 Ranger Tracking</b> |
| <b>Description:</b><br>This project models the tasks for NYISO’s tracking and monitoring of vendor progress. It includes testing, training and deployment of the delivered result.  |                                     |
| <b>Business Objective:</b><br>The objectives of the SMD 2.0 projects (A573 and A574) are as follows:<br>(1) To support compliance with FERC initiatives to standardize market rules.<br>(2) To build upon NYISO overall market design and strengthen the Day-Ahead Market (DAM).<br>(3) To eliminate known limitations and inefficiencies existing in the Real-Time Market.<br>(4) To provide full redundancy and seamless fail over capabilities for greater security and reliability.<br>(5) To address data transparency as demanded by market participants.<br>(6) To integrate State Estimator for Real-Time Scheduling (RTS) solution integrity.<br>(7) To increase supportability for maintenance and responsiveness for enhancements. |                                     |
| <b>Scope and Deliverables:</b><br>(1) SCADA / EMS / BMS system to replace existing NYISO legacy infrastructure.<br>(2) Training for NYISO Staff, Operators and Market Participants.<br>(3) Tariff Revision.   |                                     |
| <b>Deployment:</b> Factory Acceptance Test – 09/15/03<br>Market Trials – 11/01/03<br>System Cutover – 04/01/04  |                                     |

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| <b>Project ID/Project Name:</b>  | <b>A545 / Open Scheduling System / NE Energy Portal</b> |
| <b>Description:</b><br>The Open Scheduling System (OSS) is comprised of an industry leading set of tools for Market Participants and ISOs to interact, trade, and communicate within and across control areas. The initial release of OSS provides a seamless interface for submitting internal and external (NY-PJM) bilateral transactions with enhanced user tools. Upon submitting a cross seams transaction, the relevant data is automatically submitted to the necessary market systems (NYISO MIS and PJM EES) for evaluation. The OSS user interface also provides the ability to review and preschedule available transmission and ramp capability. In addition, OSS provides an industry standard protocol for communicating transaction data across control areas. |   |
| <b>Business Objective:</b><br>To simplify the process for Market Participants to enter bilateral transactions across seams. To establish an infrastructure and messaging standard for communicating transaction data between / across seams.   |   |
| <b>Scope and Deliverables:</b><br><ul style="list-style-type: none"> <li>(1) Common transaction entry interface for NYISO-PJM transactions.</li> <li>(2) Provide visibility of Ramp and Available Transmission Capability (ATC) constraints.</li> <li>(3) Coordinate with neighboring ISOs to develop a capability to pre-schedule long-term firm transactions.</li> </ul> <b>Long-Term Solution:</b> <ul style="list-style-type: none"> <li>(1) Provide a common interface for bid entry by all participating ISOs.</li> <li>(2) Provide a system in which affected ISOs receive the required bid values.</li> <li>(3) Guarantee that considered transactions are valid in all affected ISOs.</li> </ul>  |   |
| <b>Deployment:</b> <del>04/06/03</del><br><i>Rescheduled to 04/13/03 (Due to system conditions)</i>  |   |

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| <b>Project ID/Project Name:</b>  | <b>A657 / Open Scheduling System (OSS) SMD Support</b> |
| <b>Description:</b><br>Sub-Project that is a continuation of the Open Scheduling System (OSS) to include SMD 2.0 support, in-day ¼ hour scheduling and in-day pre-scheduling.  |  |
| <b>Business Objective:</b><br>Make OSS “SMD 2.0” compliant in terms of ¼ hour scheduling and in-day prescheduling requirements.  |  |
| <b>Scope and Deliverables:</b><br><ul style="list-style-type: none"> <li>(1) Evaluate the SMD requirements for ¼ hour bidding/scheduling and incorporate changes into OSS to support as necessary. Deliverables include Business Design, Technical Design, and Application Upgrade.</li> <li>(2) Evaluate the SMD requirement for in-day prescheduling and incorporate enhancements into OSS as necessary. Deliverables include Business Design, Technical Design, and Application Upgrade.</li> </ul> |  |
| <b>Deployment:</b> TBD   |  |

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| <b>Project ID/Project Name:</b>  | <b>A658 / Open Scheduling System (OSS) 2<sup>nd</sup> Node</b> |
| <b>Description:</b><br>Evaluate the requirements and build a solution to allow efficient communication of transaction data between control areas that can be used to facilitate the checkout process.  |  |
| <b>Business Objective:</b><br>Drive efficiency in the checkout process by providing NY (and its neighbors) with visibility of the transactions (with details) of neighboring control areas. A more efficient checkout process will allow NY to implement 15 minute economic scheduling and reduce the time window between market close and scheduling. |  |

**Scope and Deliverables:**

(1) OSS Automated Check Out Application. Deliverables include Business Design, Technical Design, and an application that provides control room visibility of transactions in neighboring control areas.

**Deployment:** TBD

**Project ID/Project Name:**

**A659 / Open Scheduling System (OSS) 1.x Enhancements**

**Description:**

Sub-Project that is a continuation of the Open Scheduling System (OSS) to include enhancements to Open Scheduling System (OSS) as requested by Market Participants, to include:

- (1) PJM Ramp Integration
- (2) North American Electric Reliability Council (NERC) Tagging Integration
- (3) Open Access Same Time Information System (OASIS) Integration
- (4) PJM 2-Settlement Integration

**Business Objective:**

To drive efficiency in the transaction entry process for NYISO-PJM transactions.

**Scope and Deliverables:**

- (1) Evaluate requirements and design / implement a solution for PJM ramp integration.
- (2) Evaluate requirements and design / implement a solution for North American Electric Reliability Council (NERC) tagging integration.
- (3) Evaluate requirements and design / implement a solution for Open Access Same Time Information System (OASIS) integration.
- (4) Evaluate requirements and design / implement a solution for PJM 2-settlement.

**Deployment:** TBD

**Project ID/Project Name:**

**A660 / Open Scheduling System (OSS) Online Presence**

**Description:**

Sub-Project that is a continuation of the Open Scheduling System (OSS) to include Online Presence objectives, as follows:

- (1) Generator / Load bidding functionality.
- (2) Graphical displays / reports of (Locational Based Marginal Pricing) LBMPs, outage schedules, etc.

**Business Objective:**

**Scope and Deliverables:**

- (1) Analysis of requirements, design and implementation of new OSS content to facilitate transaction decision-making and feedback.
- (2) Analysis of requirements, design and implementation of Generator / Load bidding through OSS interface.

**Deployment:** TBD

**Project ID/Project Name:**

**A548 / Decision Support System (DSS) Settlements Data Mart I**

**Description:**

The New York Independent System Operator (NYISO) will implement a Decision Support System (DSS) (built upon a data warehouse) to provide internal and external users with a single tool to facilitate data access in a flexible and efficient manner. The project will evaluate both NYISO internal and Market Participant information needs and develop a scalable architecture designed for reliable and efficient delivery of the strategic and analytical information our customers require. Ultimately, the DSS will capture critical NYISO market, settlement/billing, and operational data, and provide flexible access and

value-added analysis capabilities to the user community. Initially, the DSS will focus on providing settlement related information that will allow Market Participants to reconcile bills efficiently and effectively.

**Business Objective:**

- (1) Increase Customer Satisfaction:
  - Enable Market Participants to create more effective business strategies by providing them with more information.
  - Provide accurate billing reconciliation tools. This leads to fewer inquiries and faster response to inquiries.
- (2) Market Evolution and Excellence:
  - Provide more real-time information to facilitate quick and informed decision-making.
  - Provide customers with a regional view of market data
  - Provide internal team with good view into market transactions.
- (3) Technology Excellence:
  - Implement an enterprise wide data repository and provide analysis tools.
  - Consistent data
- (4) Reduce Cost:
  - Free up IT and business expert’s time for more value added activities.
  - Reduce maintenance and support costs.

**Scope and Deliverables:**

This initial release will deliver the content related to 4 main areas of NYISO Customer Settlements:

- (1) Balancing Energy for Generators.
- (2) Real-Time Bid Production Cost Guarantee (BPCG).
- (3) Balancing Energy for Load Serving Entities (LSEs).
- (4) Balancing Energy Transactions (Transmission Usage Charge (TUC), Transmission Service Charge (TSC), Locational Based Marginal Priced (LBMP) Energy, Replacement Energy, Bid Cost Guarantee)

**Deployment:** 06/30/03

**Project ID/Project Name:**

**A661 / Decision Support System (DSS) Settlements Data Mart II**

**Description:**

The New York Independent System Operator (NYISO) will implement a Decision Support System (DSS) (built upon a data warehouse) to provide internal and external users with a single tool to facilitate data access in a flexible and efficient manner. The project will evaluate both NYISO internal and Market Participant information needs and develop a scalable architecture designed for reliable and efficient delivery of the strategic and analytical information our customers require. Ultimately, the DSS will capture critical NYISO market, settlement/billing, and operational data, and provide flexible access and value-added analysis capabilities to the user community. Initially, the DSS will focus on providing settlement related information that will allow Market Participants to reconcile bills efficiently and effectively.

**Business Objective:**

- (1) Increase Customer Satisfaction:
  - Enable Market Participants to create more effective business strategies by providing them with more information.
  - Provide accurate billing reconciliation tools. This leads to fewer inquiries and faster response to inquiries.
- (2) Market Evolution and Excellence:
  - Provide more real-time information to facilitate quick and informed decision-making.
  - Provide customers with a regional view of market data

- Provide internal team with good view into market transactions.
  - (3) Technology Excellence:
    - Implement an enterprise wide data repository and provide analysis tools.
    - Consistent data
  - (4) Reduce Cost:
    - Free up IT and business expert’s time for more value added activities.
- Reduce maintenance and support costs.

**Scope and Deliverables:**

This release will include the following requirements:

- (1) Additional billing codes including those related to day ahead and ancillary services calculations.

**Deployment:** TBD

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|---------------------------------|---|
| <b>Project ID/Project Name:</b> | <b>A652 / Decision Support System (DSS) Settlements Data Mart III</b> |
|---------------------------------|---|

**Description:**

The New York Independent System Operator (NYISO) will implement a Decision Support System (DSS) (built upon a data warehouse) to provide internal and external users with a single tool to facilitate data access in a flexible and efficient manner. The project will evaluate both NYISO internal and Market Participant information needs and develop a scalable architecture designed for reliable and efficient delivery of the strategic and analytical information our customers require. Ultimately, the DSS will capture critical NYISO market, settlement/billing, and operational data, and provide flexible access and value-added analysis capabilities to the user community. Initially, the DSS will focus on providing settlement related information that will allow Market Participants to reconcile bills efficiently and effectively.

**Business Objective:**

- (1) Increase Customer Satisfaction:
    - Enable Market Participants to create more effective business strategies by providing them with more information.
    - Provide accurate billing reconciliation tools. This leads to fewer inquiries and faster response to inquiries.
  - (2) Market Evolution and Excellence:
    - Provide more real-time information to facilitate quick and informed decision-making.
    - Provide customers with a regional view of market data
    - Provide internal team with good view into market transactions.
  - (3) Technology Excellence:
    - Implement an enterprise wide data repository and provide analysis tools.
    - Consistent data
  - (4) Reduce Cost:
    - Free up IT and business expert’s time for more value added activities.
- Reduce maintenance and support costs.

**Scope and Deliverables:**

This release will include the following requirements:

- (1) Additional billing codes including those related to transmission congestion charges, demand response, and virtual bidding.

**Deployment:** TBD

|  |  |
|--|--|
| <b>Project ID/Project Name:</b>  | <b>A663 / Decision Support System (DSS) Settlements Data Mart IV</b> |
| <b>Description:</b><br>The New York Independent System Operator (NYISO) will implement a Decision Support System (DSS) (built upon a data warehouse) to provide internal and external users with a single tool to facilitate data access in a flexible and efficient manner. The project will evaluate both NYISO internal and Market Participant information needs and develop a scalable architecture designed for reliable and efficient delivery of the strategic and analytical information our customers require. Ultimately, the DSS will capture critical NYISO market, settlement/billing, and operational data, and provide flexible access and value-added analysis capabilities to the user community. Initially, the DSS will focus on providing settlement related information that will allow Market Participants to reconcile bills efficiently and effectively.   |  |
| <b>Business Objective:</b><br>(1) Increase Customer Satisfaction:<br><ul style="list-style-type: none"> <li>– Enable Market Participants to create more effective business strategies by providing them with more information.</li> <li>– Provide accurate billing reconciliation tools. This leads to fewer inquiries and faster response to inquiries.</li> </ul> (2) Market Evolution and Excellence:<br><ul style="list-style-type: none"> <li>– Provide more real-time information to facilitate quick and informed decision-making.</li> <li>– Provide customers with a regional view of market data</li> <li>– Provide internal team with good view into market transactions.</li> </ul> (3) Technology Excellence:<br><ul style="list-style-type: none"> <li>– Implement an enterprise wide data repository and provide analysis tools.</li> <li>– Consistent data</li> </ul> (4) Reduce Cost:<br><ul style="list-style-type: none"> <li>– Free up IT and business expert’s time for more value added activities.</li> </ul> Reduce maintenance and support costs. |  |
| <b>Scope and Deliverables:</b><br>This release will include the following requirements:<br>(1) Settlement determinants related to Installed Capacity (ICAP), working capital, interest, and adjustments.   |  |
| <b>Deployment:</b> TBD   |  |

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|--|---|
| <b>Project ID/Project Name:</b>  | <b>A664 / Decision Support System (DSS) Market Monitoring Data Mart I</b> |
| <b>Description:</b><br>The New York Independent System Operator (NYISO) will implement a Decision Support System (DSS) (built upon a data warehouse) to provide internal and external users with a single tool to facilitate data access in a flexible and efficient manner. The project will evaluate both NYISO internal and Market Participant information needs and develop a scalable architecture designed for reliable and efficient delivery of the strategic and analytical information our customers require. Ultimately, the DSS will capture critical NYISO market, settlement/billing, and operational data, and provide flexible access and value-added analysis capabilities to the user community. Initially, the DSS will focus on providing settlement related information that will allow Market Participants to reconcile bills efficiently and effectively. |   |



**Business Objective:**

(1) Increase Customer Satisfaction:

- Enable Market Participants to create more effective business strategies by providing them with more information.
- Provide accurate billing reconciliation tools. This leads to fewer inquiries and faster response to inquiries.

(2) Market Evolution and Excellence:

- Provide more real-time information to facilitate quick and informed decision-making.
- Provide customers with a regional view of market data
- Provide internal team with good view into market transactions.

(3) Technology Excellence:

- Implement an enterprise wide data repository and provide analysis tools.
- Consistent data

(4) Reduce Cost:

- Free up IT and business expert's time for more value added activities.

Reduce maintenance and support costs.

**Scope and Deliverables:**

(1) Initial iteration of Market Monitoring related data mart. Will likely address / replace some of the requirements of the existing Market Monitoring Relational Database (MMRD) applications.

(2) Assist in providing the SMD 2.0 related reporting / query tools required by Market Monitoring and Performance (MMP).

**Deployment:** TBD

**Project ID/Project Name:**

**A559 / Enterprise Application Interface (EAI) Phase II**

**Description:** This project will enable additional systems to use the Enterprise Application Interface (EAI) infrastructure.

**Business Objective:**

The current mechanism for application integration is unmanageable, costly to maintain and not scaleable or reusable. By enabling more systems to use EAI this project will provide scalability and adaptability for NY ISO systems, facilitate data access and communications between systems will be increased.

**Scope and Deliverables:**

- (1) All key systems to be enabled on EAI.
- (2) Data Exchange Replacement.
- (2) Real Time Trending.

**Deployment:** 08/01/03