NYISO
Projects Budgeting *and*
Financing Process

Draft
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1.0   INTRODUCTION

An effective, projects budgeting and financing process is essential to ensure efficient operations and sound investment decisions. This report details a recommended approach to identify, evaluate, prioritize, fund, and manage operating and capital project investments for the short and long term operation of the NYISO. This process is designed to allow market participants, NYISO staff and the ISO Board to effectively manage this process through the BS&P, PPT and the larger committee structure.   The project budgeting and financing process described herein can be applied to the identification, selection, controlmonitoring, and evaluation of all operations, IT, billing and capital projects. This process is not designed to manage staffing and ongoing operations of the NYISO.

The recommended approach for this project budgeting process has five phases, as described below.

1.1   Budgeting

An initial step in the process is the establishment of a multi-year budget. While many projects may be desirable and justified in one manner or another, there are only a limited amount of resources available for major projects. All projects selected must be prioritized and measured against the available pool of resources.   The first step is for Market Participants and the NYISO Board to establish a long term budget that clearly identifies the amount of funds available for projects and capital expenditures. The budget would identify those funds that would be treated as an expense and those funds that would be available for longer term financing.

The recommended approach for this project budgeting process has four phases, as described below.

1.2   Identification

Requests for projects can come from a number of different sources. These can include, NYISO identified enhancements or correction of flaws, FERC orders, Committee, Subcommittee and Working Group Actions, NYISO strategic staff initiatives, PSC actions, Seams Issues Resolution, and Market Participant requests. All projects that require expenditure of funds from the Project Expesne Budget or the Project Finanacing Budget will be required to go through the Project budgeting and financing process.

All requests for projects will be noted and included in a single list properly identifying the source of the request and its status in the process. At this point in the process the actions will be considered as issues until they are further evaluated as discussed in the following steps.

1.~~2~~3   Selection

The selection process identifies all new issues and recurring projects for inclusion into the project budget portfolio based on an overall targeted budget cap.

Within this part of the process issues are evaluated and prioritized. Issues within the allowed budget will then be selected for implementation.

The proponent of an issue will ~~then~~ be required to perform the necessary analyses to justify the proposed project. It is recognized that in many cases the NYISO may be required to supply the necessary data to support the analyses and they will be required to supply that information in a timely manner.

Within the selection phase, issues are screened, evaluated (Cost/Benefit Analysis), prioritized (included in an existing activity or deemed a project), given a recommended implementation date and provide a request for a ConOps to be performed.

The review process used (ConOps) will determine the magnitude and extent of the project, if it can meet the implementation date, the overall cost/benefit resulting, impacts on existing budgets, and a recommendation from the NYISO on whether or not to proceed.

Proposed issues will then be submitted to the Budget, Standards & Performance Subcommittee (BS&P) for review. Prior to the proposal going to the Management Committee (MC)~~It will be~~, the BS&P's ~~role to~~will ~~determine if all of the necessary~~evaluate the analyses and rankings developed by the proponent.~~ are in place~~ The BS&P will provide a report to the MC identifying whether the project met the budgeting review requirements, whether the project can be accommodated within the budget without impacting other already scheduled projects, whether the project should qualify for long term project financing, and whether the project would require deferral of other already scheduled projects and/or additional funding beyond that which is contained in the multi-year budget. ~~prior to the proposal going to the Management Committee (MC).~~

If the BS&P determines that the project did not meet the budgeting review requirements, the project proponent may choose to resubmit an enhanced proposal to the BS&P or forward the project to the MC without the required analysis. The proposed project will then be presented to the MC for a vote on whether the project should be approved and implemented.

Approved projects will then be forwarded to the Project Priority Team (PPT) for prioritization and scheduling ~~implementation~~. The PPT shall take into account the budget impacts of its schedules when determining prioritization and scheduling. The BS&P will

review the PPT approved project schedules and budgets to determine the amount that should be financed and expensed and to assure that the project can be accommodated within the approved project budgets and actual current year budget trends. Any problems will be referred to the PPT for consideration and possible action by the MC and NYISO board.

~~Proposed projects should be presented during the course of a given year for inclusion in the following years budget.~~ As projects are approved, prioritized and scheduled, a~~The~~ Project pPriority ~~listing~~ Schedule ~~will be continually revised as new projects are added and finalized~~a Project Budgets Report will be developed and distributed by NYISO staff. ~~at the end of the year so that budget constraints are met. Projects proposed for implementation during the budget year must have a compelling reason to go forward and other projects will then have to be readjusted to make room for the new project within the available resources.~~ These reports will be used to develop priorities, to evaluate the financial impact of proposed projects, and develop future years budgets. Within a budget year, all scheduled projects must fit within the adopted projects budget. When developing schedules for projects that impact future year budgets, projects shall be scheduled in a manner that will fit within the long term project budgets. It will take an action of the MC and NYISO Board to initiate projects that will exceed the future year project budgets.

1.~~3~~4 ~~Control~~Monitoring

An ongoing monitoring process that manages all ongoing and proposed projects needs to be in place to ensure that each investment continues to be required and, as such, is delivered on schedule and within budget. NYISO staff will have the responsibility of preparing the reports and reporting on the status to the PPT and when there are budget impacts to the BS&P.

~~All p~~Project schedules will be developed for all projects. Milestones, cashflow tracking and critical path analysis will be developed for each project and monitored monthly through PPT review.

Key and strategic projects will also be reported at the Committees on a monthly basis.

Once the project schedule, milestones cashflow tracking, critical path and resource allocation have been identified, only project exception reporting will be required on a routine basis. Significant changes to the project scope, schedule or cost may require re evaluation and reprioritization of the project and other projects. However, it will take an action of the MC and NYISO Board to reschedule and reprioritize projects in a manner that will exceed the future year project budgets.

1.54   Evaluation

The review process will be tied into the project close-out process. It will be used will determine if a project has realized its expected mission and business performance goals. During the evaluation phase, the overall effectiveness of the project budgeting process of the project will be reviewed.   Lessons learned during the evaluation phase of the projects should be geared towards modifying future project budgeting process and selection decisions.

2.0   PROJECT BUDGETING AND REPORTING

Part of the annual budget process will include the development of a five year budget for NYISO operations and projects. The initial five year budget projection will be developed using the 2003 budget as a base point. In future years, the five year budget will be developed an approved as part of the annual budget process. While the first year of the budget will be very detailed and complete, the budget will be less precise and detailed for future years. At a minimum the budget will show the amount of money dedicated to projects and project financing.

2.1   Project Budget Summary Report

Part of the annual budget will include a supporting report that identifies project expenditures and project financing.

The project expenditures portion of the report will provide the following information by year:
- The total amount of money available from project expense funding.
- Project expenditures for projects already underway broken down by the amount to be expensed and the amount to be financed.
- Project expenditures for projects that have already been prioritized and scheduled by the PPT but are not yet underway broken down by the amount to be expensed and the amount to be financed.
- Funding available for project expenses that have not yet been prioritized and scheduled.

The project financing portion of the report will provide the following information by year:
- The total amount of money available for payment of financed projects
- The amount of money that is required to pay for completed projects that have been financed.
- The amount of money projected to be required to pay the financing of projects already underway
- The amount of money projected to be required to pay the financing of projects already prioritized and scheduled by the PPT but are not yet underway.
- The amount of money available for financing of projects that have not yet been prioritized and scheduled.

2.2   Project Budgets Report

The Project Budget Report would be updated by NYISO staff as new projects are prioritized and scheduled by the PPT. The report would contain the following
- Project Budget Summary Report described above
- A listing of completed financed projects grouped by year with the past and future recovery.

- A listing of active projects by project showing the budgeted amounts, historic expenditures and projected expenditures along with a breakdown by expensed and financed portions of the project. For financed projects, the expected cost recovery of the project by year.
- A listing of scheduled project by project showing the budgeted amounts with a breakdown of expensed and financed portions of the project. For financed project, the expected cost recovery of the project by year.
- A listing of approved by unscheduled project with budgeted costs by quarter.

23.0 INITIAL SCREENING OF PROJECT INVESTMENTS

All proposed projects **must** go through the screening stage, to determine whether an investment should be considered for additional review. If so, the NYISO will determine the appropriate level of investment analysis (as suggested by the type, size, and risk associated with the proposed project), review, and decision-making.

Specific roles and responsibilities of the key participants in the screening stage of the project budgeting process are described in Table 1.

Table 1.   Screen Stage Roles and Responsibilities

Party	Roles & Responsibilities
Proponent	Develop project proposal Provide additional screening information Review project proposal against screening criteria Determine project viability
BS&P	Develope of multi-year budget in conjunction with the NYISO Board Review screening of projects Review preliminary results Determine compliance of project with screening requirements. Approve for pPresentation to MC or return to proponent for additional analysisreport on compliance with review requirements and budget impact statement. Review of budget impacts of PPT decisions.
MC	Review proposed project Approve or disapprove Approved projects forwarded to PPT In conjunction with NYISO Board approve projects that would exceed multi-year budget
PPT	Determine best means ofschedule and priority of implementing approved projects within budget constraints.

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23.1   Develop Project Proposal

The first stage of the project budgeting process centers on developing and screening a preliminary project proposal, which is prepared by the project proponent. At this stage the proposal should include the minimum set of information.

The following information should be included in the preliminary project proposal.
- Project Name
- Project Description
- Project Category (economics, replacement, regulatory, etc.)
- Alternatives
- Expected Benefits
- Expected Returns
- Expected Costs
- Expected Schedule
- Expected Risks
- Definition of Performance Measures

23.2   Review Project Proposal Against Screening Criteria

The principal objectives during the screening stage are to determine whether the project is viable and decide if it should be analyzed through the evaluation process.

Apply Screening Criteria

The proponent will use the following criteria to screen the preliminary initiative proposal.
- Does the project support core business functions? Is it critical to the performance of these functions?
- Does the project provide economic benefit (quantify)?
- Does the project support operational or work processes that have been simplified or otherwise redesigned?
- Does the project improve service reliability?
- What are the expected benefits of the proposed initiative?
- Is the project required by regulation?
- Are there major risks involved that will reduce the likelihood of the project performing as expected?
- Do the project's performance measures adequately reflect the benefits to the appropriate business objectives?

- What are the alternatives? How do the alternatives compare with the recommended proposal?

~~2~~3.3   Recommend Evaluation Process

If a project is considered viable, the project proposal is supplemented with additional detail to continue through the evaluation process.

34.0 SCORE PROJECT PROPOSAL

The NYISO staff will employ a uniform methodology to assign a set of numeric values to a proposed project on the basis of expected returns, costs, and risks. The methodology should rely on the application of explicitly defined and weighted selection criteria in accordance with well-defined scoring rules. Scores assigned to proposed projects would be used in the ranking process.

34.1 Apply the Evaluation Process to Assign a Project Score

Score Project

To score a proposed project the proponent will provide results of the initial screening evaluation to NYISO staff for review. Applying uniform and consistent decision criteria will provide NYISO staff with the necessary input to rank the various capital investments.

The Scoring stage is not intended to be the sole basis for decision-making. Rather, it will serve as one factor in the overall selection process. The weighting of multiple decision criteria will allow decision-makers to determine the relative importance of selection factors.

The ability to develop and refine specific rules is crucial to the success of this approach. The weighting and scoring rules can be adjusted, as experience with the model and process is gained. Although the scoring approach accommodates the creation of a rank-ordered list of projects, final investment decisions should be influenced by additional information, including input derived from collaborative forums, as appropriate.

Present Project Scores

Scoring results can be presented in a variety of ways to provide a visual means to compare the strengths and the weaknesses of alternative projects.

34.2 Analyze Evaluation and Scoring Results

For each proposed project, the NYISO staff will review results and findings of the evaluation process and decide whether to recommend the project for further consideration. The numeric value is used in ranking and prioritization of proposals with respect to selection for funding and approval for implementation.

34.3 Rank Projects

Using the fundamental concepts of portfolio management, such as return, cost, and risk, as well as other decision factors, the NYISO staff ranks projects still under consideration.

The ranking decision will also be influenced by the results and findings of on-going and completed evaluation activities and project scoring and re-scoring efforts as well as budget constraints.

~~3~~4.4   Recommend Project for Selection

After completing the review, the proponent will submit those proposed projects to BS&P for consideration. The recommendation should highlight significant issues that are likely to affect the success of the project, such as cost, technical complexity, and dependence on other capital projects. The BS&P will review the proposal documentation for completeness. Completed proposal packages will then be forwarded to the Management Committee for a vote on approval.

~~4~~5.0   SELECT INITIATIVES FOR CAPITAL INVESTMENT PORTFOLIO

The selection of projects by the Management Committee will be based on project merits and the information gathered and analyzed during the screening and scoring stages of the budgeting process as well as budget constraints.

Approved projects will be submitted to the PPT for ~~implementation~~prioritization and scheduling.

~~5~~6.0   ~~CONTROL~~ MONITORING PROJECTS

The ~~control~~ monitoring phase of the project budgeting process requires continuous monitoring of on-going projects through development or acquisition life cycle and deployment, up to point of operation. At that point, the evaluation phase of the process begins. The objective of the ~~control~~ monitoring phase is to ensure timely oversight, quality control, and executive in a disciplined, well-managed, and consistent manner. This will promote delivery of quality projects and results in projects that are completed within scope, on time, and within budget.

The ability to monitor projects adequately relies on effective project management activities. Automated project cost and schedule control systems should be utilized to manage, maintain, and provide shared access to project baselines, monitor changing requirements, and track resource allocations.

The frequency of ~~the control review~~monitoring should be established in the selection phase based on factors including strategic alignment, criticality, scope, cost, and risk associated with the project.

~~5~~6.1   Establish and Maintain Initiative Cost, Schedule, and Technical Baselines

The NYISO staff is responsible for establishing project management and execution plans, procedures, and practices to support project-monitoring activities. The NYISO staff should provide periodic updates to PPT and BS&P on the status of the project's cost, schedule, and technical baselines. Baselines provide both the framework and sufficient detail to assess the status of the project's major milestones, decisions, activities, and work products and deliverables.

~~6~~5.2   Maintain Current Project Cost, Schedule, Technical, and General Status Information

The NYISO staff will collect information on resources allocated and expended throughout the pre-operational stage of the project. The NYISO staff also will maintain a record of changes to the technical components of on-going project. Changes may later be reviewed for continued funding.

~~6~~5.3   Assess Project Progress Against Performance Measures

During the pre-operational stage of a project, the NYISO staff will determine whether additional project evaluation is warranted. If so, the NYISO staff will perform a more detailed review of the project to assess progress against its planned cost, schedule, and technical baselines. The primary purpose of assessments is to ensure that projects remain on schedule and budget by identifying issues or deficiencies that require corrective action.

~~6~~5.4   Prepare Project ~~Control~~ Monitoring Status Reports

With a project's ~~control~~ monitoring review schedule established during the selection phase, the NYISO staff should prepare a ~~Control~~ Monitoring Status report for review by PPT and BS&P. The status report will be used to determine whether to recommend to the Management Committee that the project continue, be modified, or canceled.

~~7~~6.0   EVALUATE INITIATIVES

The evaluation phase of the project budgeting process begins after an investment becomes operational, suggested within six months of deployment. The Evaluation Phase "closes the loop" of the budgeting process by comparing actual cost and performance criteria against estimates. This will not only allow performance to be assessed, but also

helps identify areas where decision-making can be improved. The evaluation phase focuses on two primary steps.

1. Determining if the specific investment met performance, cost, and schedule objectives.
2. Determining the extent to which the budgeting process improved the outcome of the investment.

The two steps of the evaluation phase include conducting a Post Implementation Review (PIR) and applying lessons learned, both at project and process levels. Results of the PIR are reported to the PPT and BS&P to offer a better understanding of project performance and assist the NYISO staff in directing any adjustments to the project or to the budgeting process.

The timing of the PIR would be initially determined during the selection phase. The PIR for a new project generally should take place about six months after the project is in service. If a project is cancelled, the PIR should take place immediately. Review of a cancelled project defines lessons learned for future investment decisions and activities.

7~~6~~.1   Conduct Post-Implementation Reviews

The central objective of the PIR is the investment evaluation, in which the NYISO staff assesses the impact the project has had on reliability, economics, customer satisfaction and system capability.

The investment evaluation focuses on three primary areas described below.

1. Impact to Stakeholders
   The impact a project has on stakeholders is typically measured by the NYISO staff with surveys (formal or informal), interviews, and feedback studies.

2. Ability to deliver performance measures (Quantitative and Qualitative)
   The project's impact should be carefully evaluated to determine whether it met its original and possible modified performance goals

3. Ability to Meet Performance Goals
   − Cost:
   − Return:
   − Schedule:
   − Risk Analysis:

A report should also be submitted to the PPT and BS&P for all projects to document lessons learned, including costs, project management and technical insights. A high-level assessment of management techniques, including organizational approaches, budgeting, acquisition and contracting strategies, tools and techniques, and testing

methodologies is essential to establish realistic baselines and ensure the future success of other projects. To capture lessons learned the project manager should develop a summary report after completion of the PIR.

8.0 APPLY LESSONS LEARNED

8.1 Evaluate Capital Planning and Investment Process

Through regular use and practical experience, the proponents, NYISO staff and BS&P should expect the project budgeting process to mature and evolve.

8.2 Identify Lessons Learned and Recommend Process Improvements

Having identified the strengths and the weaknesses of the current process, the NYISO staff, PPT and BS&P will work together to develop, recommend, and modify the project budget process as appropriate.