October 2009 10-Year Assessment
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Project justification, development, and prioritization

ATC has and is continuing to develop processes that allow us to identify system needs and opportunities, to develop proper project scope and schedule and to assess project value and priority. These processes include the following.

- Project justification (system needs and opportunities assessments)
- Project development
- Project benefit identification and prioritization

All of these processes are being enhanced to include appropriate stakeholder input.

Project justification

The system needs and opportunities assessments are the key drivers for the project creation and justification process. They are also one of the major subjects of the 10-Year Assessment. ATC has planning criteria and is continuing to develop stakeholder input processes to help determine which projects bring value and have appropriate justification.

Project development

There are four possible stages in the Planning portion of a project's development:

- ❑ System Needs and Opportunities Identification
- ❑ Project or Program Development and Continued Need Investigation
- ❑ Project Alternatives or Program Solutions Development and Preferred Alternative Identification
- ❑ Project/Program Scope and Proposed Project Request Development

System Needs and Opportunities Identification

ATC system needs and opportunities are investigated and identified on an ongoing basis. However, particular attention is given to the system reliability needs assessment on an annual basis as required for compliance with the NERC Reliability Standards on transmission system performance. All identified system needs or opportunities are evaluated and compared to each other for possible interrelationships and coordination. In addition, comments on identified needs and opportunities are solicited within ATC and from external customers when it is practical.

Project or Program Development and Continued Need Investigation

After one or more future transmission system needs or opportunities are identified, Solution Options that may address the identified needs are solicited within ATC and from external Customers. Each Solution Option is subject to sufficient evaluation to determine whether it would work to mitigate the identified needs. The results of the Solution Option evaluation are recorded in a project development document. The continuity of identified needs is investigated on at least an annual basis when the system reliability needs assessment is updated.

If a Proposed Project Request is not needed until a future date, a Provisional Project Request is prepared for one of the Solution Options that works. Preliminary project scope and cost estimates are developed for the selected Solution Option. The Provisional Project description is recorded in a project request document and is submitted to add the project to the ATC capital budget.

Project Alternatives or Program Solutions Development and Preferred Alternative Identification

All of the Solution Options that work are classified as project Alternatives. Preliminary project scope and cost estimates are prepared and documented for each Alternative. Any other relevant Alternative considerations are also identified and documented. The Alternatives are compared to each other to determine which one is the Preferred Alternative. The Preferred Alternative selection is reviewed and approved within ATC and by any pertinent Customers. The comparisons and conclusion are recorded in a Project Scoping Document.

Project/Program Scope and Proposed Project Request Development

Detailed project/program scope and cost estimates are developed for the Preferred Alternative. The Proposed Project/Program is reviewed and approved within ATC and by any pertinent customers. For projects, the description is recorded in the Project Scoping document and a Proposed Project Request is submitted to add the project to the ATC capital budget.

Project benefit identification and prioritization

In 2009, ATC updated its project prioritization methodology to be more focused on the consideration of: (1) project/program cost metrics, (2) project/program benefit metrics, and (3) project/program advancement and deferral flexibility.

The following discussion presents a description of the pilot project benefit and prioritization method that ATC is using and developing to appropriately value and prioritize projects. Project benefit identification helps to understand the value of different projects compared to their cost. Project prioritization is a process to help resolve capital budget and human resource constraint issues. It may also assist company employees in the prioritization of their work and provide guidance for scheduling pre-certification activities.

The preliminary project benefit and prioritization method is being used as a screening tool to identify projects that are candidates for capital budget advancement or deferral. It should be noted that project benefit identification and prioritization by itself does not cause a project to be advanced or delayed. It is only a tool for screening projects that may have reason to be advanced or delayed compared to others. If there are compelling reasons to modify the capital budget, then we will consider this tool, as well as risk and with appropriate input from stakeholders to evaluate the possible effects of advancing or delaying selected projects. However, the final decision of whether a candidate project will be advanced or deferred is still reached by considering the specific details of each project, including appropriate stakeholder input.

The project benefit metrics have also been helpful in the comparison of multiple alternatives to address the same system needs and identifying the preferred alternative.

Project/Program Cost Metrics

The preliminary project/program costs that are used in the pilot prioritization methodology are the costs from the customer perspective. These costs are the net present value (NPV) dollars of the revenue requirement associated with the project or program. They are not the capital project draft budget dollars (project request cost estimate) or capital project construction cash flow

dollars (actual and remaining cash flow costs). These cost metric values are developed by the Finance department using their established revenue requirement methods and assumptions.

- *Total Capital Costs* – the NPV of the revenue requirement being driven by the project based on the actual and projected capital costs to-date in our 10-year capital forecast.
- *Capital Costs Remaining* – the NPV of the associated revenue requirement being driven by the project based on the actual capital costs to-date in our 10-year capital forecast.
- *Total Operation and Maintenance (O&M) Costs* – the NPV of the revenue requirement being driven by the project based on the actual and projected O&M costs to-date in our 10-year capital forecast.
- *O&M Costs Remaining* – the NPV of the associated revenue requirement being driven by the project based on the actual O&M costs to-date in our 10-year capital forecast.

Project/Program Benefit Metrics

Project/program benefits are captured and used for prioritization purposes through a number of benefit metrics.

The preliminary benefit metrics that are being used in the pilot prioritization methodology are given below.

Cost Savings

- *Capital cost savings* – The net present value (NPV) dollars of the revenue requirement (RR) for 40 years of associated capital cost savings).
- *Operating and maintenance (O&M) cost savings* – The NPV dollars of the RR for 40 years associated O&M savings).
- *Direct customer cost savings* – The NPV of the revenue requirement for 40 years of associated direct customer savings. Basically the different between a Distribution Only solution and the chosen solution.
- *Losses reduction savings* – The net present value of the expected savings associated with the reduction in system losses by the implementation of the project over 20 years.

Access/Capacity Improvements

- *Congestion reduction savings* – The net present value of the expected 70/30 savings metric from PROMOD economic analysis program for 40 years.
- *Potential import/export transfer capability increase* – The amount of potential incremental import/export transfer capability that is added by the implementation of the project. The basis for the capability value is the summer normal rating or the manufacturer's nameplate rating of the associated facilities.
- *Potential internal transmittal capability increase* – The amount of potential incremental generation capability, load-serving capability, or transmission circuit capability that is added

by the implementation of the project. The basis for the capability value is the summer normal rating or the manufacturer's nameplate rating of the associated facilities.

Compliance/Performance Criteria Fulfillment

- *Number of forecasted compliance needs addressed* – The number of NERC single contingencies, which produce system performance needs according to the 10-years-in-the-future system assessment that would be addressed by the implementation of the project.
- *Reduction in the amount of load at risk for the most significant forecasted compliance need* – The reduction in the amount of load and/or generation, which would be at risk for the most significant NERC compliance need in the 10-years-in-the-future system assessment that would be addressed by the implementation of the project.
- *Number of forecasted ATC criteria needs addressed* – The number of ATC (non-NERC) single contingencies, which produce system performance needs according to by the 10-years-in-the-future system assessment that would be addressed by the implementation of the project as indicated.
- *Reduction in the amount of load at risk for the most significant forecasted ATC criteria need* – The reduction in the amount of load and/or generation, which would be at risk for the most significant ATC criteria need in the 10-years-in-the-future system assessment that would be addressed by the implementation of the project.

Asset Renewal/System Performance Improvements

- *Sustained outage count reduction* – The expected sustained outage count reduction per year for the life of the project.
- *Sustained outage energy reduction* – The expected sustained outage energy reduction per year for the life of the project. This calculated from the average amount of load that is expected to be outaged multiplied by the average number of outages per year and the average outage duration.
- *Momentary outage count reduction* – The expected sustained outage count reduction per year for the life of the project.
- *Momentary outage load reduction* – The expected momentary outage load reduction per year for the life of the project. This value is the average amount of load that is expected to be outage by each event multiplied by the average number of events per year.
- *Safety performance* – The increase in the margin of safety or of the performance ratings limits of a piece of equipment (e.g. breaker) or facility (e.g. transmission line).

Environmental Improvements

- *SF6 gas reduction* – The expected reduction in the release of SF6 gas due to the repair of leaks or avoidance of breaker failure.

- *PCB fluid reduction* – The expected reduction in the release of PCB fluid due to the removal or replacement of equipment with PCBs.
- *Lead reduction* – The expected reduction in the release of lead due to the removal or replacement of equipment with lead.

The benefit metrics are not "weighted". Each benefit metric value is independent and not normalized or otherwise correlated with respect to any of the other benefit metrics.

A benefit metric value is only developed if the benefit is expected to be significant and able to be quantified with an appropriate amount of effort. Limited or no benefit metrics are generally developed for Provisional projects. No benefit metrics are generally developed for Conceptual (Placeholder) projects.

We re-emphasize that the preliminary project benefit and prioritization method is being used as a screening tool to identify projects that are candidates for capital budget advancement or deferral. Project benefit identification and prioritization by itself does not cause a project to be advanced or delayed. It is only a tool for screening projects that may have reason to be advanced or delayed compared to others. If there are compelling reasons to modify the capital budget, then we will consider this tool, as well as risk and with appropriate input from stakeholders to evaluate the possible effects of advancing or delaying selected projects. However, the final decision of whether a candidate project will be advanced or deferred is still reached by considering the specific details of each project, including appropriate stakeholder input.