

Policy Issue #1 Refine the Screening Criteria

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Our task was to review the screening tool put together by Energy and Environmental Economic (E3), and to revise it as appropriate. The screening tool is comprised of a two-page sheet to be filled out by the transmission planners, and individual worksheets of an Excel workbook to be filled out by analysts doing the studies to determine if NCAs can defer transmission construction. In general, we like the screening tool. We have the following comments to help improve it.

Screening Tool for Transmission Planners

This initial part of the screening tool is a three-page document. It is shown in Appendix A. The tool is for use of transmission planners and is broken down into six parts, as follows:

1. Project applicability,
2. Project timeline,
3. Project cost,
4. Avoidable cost levels,
5. Recommendations, and
6. Screening notes

Project applicability has four parts:

1. What problems the proposed transmission project is addressing?
2. What are the drivers of the construction alternative?
3. Time from critical contingency to problem occurrence?
4. Given 1-3, can NCAs solve the problem? Yes? Or No?

Screening Committee's response: We resisted the temptation to edit this section. After discussing possible edits to this section, we came to the realization that everything we were discussing could be put into the Screening Notes in box number 4. We did recommend changing the size of that box to give a visual clue as to the importance of more discussion beyond the short responses enabled by the existing format.

Project timeline shows current date, date at which project construction should commence, and when the project would be energized. It then asks whether there enough time to initiate NCAs, using a set number of months for commencing construction and energization date. *Screening Committee's response: Our only concern here were the fixed time frames in boxes 5 and 6 that would dictate whether to move forward or not. We would prefer that decision to be a common sense decision based on exigencies of the*

moment, as opposed to being dictated by a set time period that may or may not be germane at a different time.

Project Cost lists the total project cost, the year the costs will be expensed, costs that are already sunk (e.g. land costs), and asks the question: Is the total costs above a limit, that would justify going forward with the study? Two million dollars is the limit in the screening tool currently.

Screening Committee's response: We recommended no revision to this section.

Avoidable Cost Levels shows the NCAs needed by year to defer the project, based on peak-load forecasts, the costs saved from deferral of the project, and the amount that the TBL could pay from its avoided costs for NCAs. It also shows inflation rates and interest rates in nominal terms. Finally, it asks the questions:

1. Is the total avoidable cost in any year greater than \$50/kW?
2. Is the project sum of avoidable costs over 5 years greater than \$250/kW?
3. Are either or both questions Yes? Then move forward. If no, stop.

Screening Committee's response: One editorial change would remove DG from the first line, and simply show the number of MWe needed to defer the project. Another would clearly state that the discount rate is in nominal (or real) dollars. Also, as we did in the Project Timeline section above, we would remove the avoidable dollar amount as decision-making criteria. It is premature at this point to make that decision. The decision to proceed is not one that is known at this time. Beyond this stage of the analysis, we may find available funding from other stakeholders such as the distribution utility and the PBL, e.g. In addition, the second part of the screening tool contains avoidable costs of distribution and generation, which may be more valuable than deferring the line itself.

The Recommendations section asks the simple question: Is this line a candidate for NCA solutions?

Screening Committee's response: This section should clearly be from the perspective of the transmission planner filling out the form, and should recognize a lot of work is needed before a decision to proceed, or not, is made. For example, if we can solve the institutional barriers that keep distribution utilities and the PBL from investing in load reduction, projects that may not seem avoidable from a transmission planner's perspective may become so as other perspectives are considered.

Screening notes allows the person filling out the screening tool to expand on some of the short responses to the first five sections.

Screening Committee's response: We should emphasize the importance of this section, especially box number four from the transmission planner's perspective.

Remaining Screening Tools for Analysts Doing the NCA Studies.

The second part of the screening tool is to be used by the person or persons doing the full analysis. In the case of the pilot projects, this is a team comprised of BPA's PBL and TBL with guidance from E3.

The second part of screening tool is embedded in an Excel workbook. For the Olympic Peninsula, for example, this workbook has the name "BPA Screening Tool Final #2." The worksheet "General Assumptions" contains the remaining screening items. All of the information from the transmission planner's screening tool (see above) is transferred to the general assumptions worksheet. The rest of the material is essentially inputs to the model that finishes the screening process. Other inputs include:

1. Discount rates for all stakeholders,
2. TBL's transmission rate,
3. Load flow distribution factor,
4. Avoided costs of the distribution system (Currently set at zero.),
5. Breakout of time-of-use (TOU) periods, and how transmission deferral is allocated over them,
6. Environmental externalities,
7. Capacity losses at peak hour,
8. Average marginal energy losses by TOU period,
9. Generation price forecasts by TOU,
10. Distribution utility rates by sector and component, and
11. Other fuel costs in the germane area,

Screening Committee's response: A review of these general assumptions leads us to believe that everything that needs to be here is here. However, many of the key assumptions have to be guessed at because it is difficult to get data from distribution utilities about their individual loads and forecast of those loads. For example, distribution avoided costs are currently set at zero, because we know no better. But, this is potentially a big error. Maybe there should be another committee of the Round Table reviewing the inputs in the "general assumptions" worksheet.