

Stakeholder Concerns/Issues Raised during the Current WestConnect Planning Cycle

The objective of model development is to support the WestConnect Regional Planning Process. This Process was established to identify regional solutions to more efficiently or more cost-effectively provide regional transmission for WestConnect. ITC and other Independent Transmission Developer sector members provided comments and recommendations before and during the current Two-Year Planning cycle to help improve the regional planning process. Some progress has been made on adopting recommendations that result in study of potential regional projects. However, since WestConnect's inception, no regional issues have been identified through the WestConnect planning processes—despite multiple announcements of changes to the regional generation mix. To further support the goal of WestConnect in identifying regional solutions, the following concerns/issues were identified in the recent study cycle and these should be considered and used to improve the WestConnect regional planning process.

Production Cost Modeling (PCM)

-) **Expanded Constraint Analysis Needed** - A broader list of contingencies should be evaluated in the PCM process: Although N-1 analysis is done during the reliability portion of the planning cycle, N-1 constraints (and N-2 constraints for common corridor lines) are not included in the Production Cost Modeling (PCM) or economic analysis portion of the planning cycle. Without doing this type of analysis, congestion on the WestConnect regional transmission system cannot be fully evaluated. The methodology wherein entities suggest their top three contingencies for the broader WECC Regional study should be expanded to include study of n-1 contingency monitoring pairs for the entire interconnection. RASs should be evaluated to verify that the RAS action mitigates the overload conditions without causing increased congestion on other elements.

Process

-) Data integrity—Late stage data changes should be avoided or mitigated: Are additional checkpoints needed for model validation? Should data changes be considered as sensitivity cases instead of base case changes? Significant changes submitted near the end of the recent PCM study effort that indicate a focus on data integrity may be helpful.
-) Net Present Value (NPV) Analysis—Continue and document the use of NPV Analysis for life-cycle congestion costs and articulate the assumptions used in any written documentation. Include a table of results from to facilitate comparison of potential congestion on the studied elements between study cycles.
-) Explaining Away Issues—The current process provides the ability for entities to 'explain away' issues that show up in the PCM as not being relevant. Such issues have been explained as not relevant to regional needs because the issues would be managed in real time. The point of the regional study is identification of regional solutions, not a 'whack a mole' approach by an individual entity solving congestion on its system that shows up in regional cases by strategies such as adjusting a phase shifting transformer, opening breakers, or adjusting equipment

ratings, etc. all of which possibly push congestion somewhere else that has not been studied—and which potentially mask a regional need

- J Criteria for Inclusion of Planned Projects (including local projects and generation projects) in models--A regional definition of “planned” projects that can be included in the base case is needed. This is especially important for projects that show up more than three years out. This is important because there are no requirements for a TOLSO to actually build a local project or generation that is repeatedly included in the model. Criteria for inclusion of such projects in the base case should be developed and documented by the Planning Subcommittee for the next cycle. Elements to establish what is included in the model should include:
 - o Attainment of milestone checkpoints that indicate whether a project is moving forward.
 - o Once a project is in the model, an explanation(s) of why a project is moving forward or not moving forward should be included in the study documents.
 - o Consideration of a time certain where a project that is not moving to construction ages out of consideration and is taken out of the model.
- J Tighten Up Use of Resource Additions for Purposes of Meeting Load Forecasts--It is our understanding that TOLSOs can simply add generation resources to the model to meet load with no consistent criteria. This could mask congestion on the system and/or reliability issues that could otherwise justify a regional project and it also prevents the study of regional transfer of more cost-effective resources from another TOLSO’s footprint. At the very least, resource inclusion criteria should be established in the WestConnect Planning process so that TOLSOs short on resources, would follow a framework to ensure the type and location of a resource added to the model is consistent with reasonable engineering and commercial judgment.
- J Studies should include a scenario wherein the planned/conceptual projects (including generation) that are not moving to construction) beyond three years out are removed from the model. This type of scenario could help determine the effects of not being able to complete future projects and/or what regional projects may be more cost effective than multiple local projects, especially local projects grouped in electrically close areas. Essentially, such a scenario would be an evaluation of potential regional solutions to address the results of multiple local or inter-utility issues.
- J Each TOLSO should stipulate that the Transmission Service Requests (TSRs) and Generation Interconnection (GI) requests, submitted to the study process are meeting milestones to move forward in conformance with each TOLSO’s Tariff Rules. A scenario with all of these TSRs and network effects of these GIs in place should be evaluated to determine if a regional project can best serve the aggregate needs.

Lessons Learned

- J The Renewable Portfolio Standard Public Policy Check analysis was useful as a baseline and will become more useful over time and should be continued moving forward.
- J The NPV Analysis for Life-cycle congestion costs was informative and should be enhanced and assumptions documented going forward.
- J The analysis of transmission hurdle rate reduction from 100% to 50% was instructive. We support carrying this forward as more tightly integrated/expanded markets will affect interchange flows.

Recommendations for improvement of the Planning Subcommittee Voting Process

There is not a defined voting mechanism to resolve concerns about the process. For example, went from majority wanting “spectrum” to flipping and showing 100% wheeling as base and the 50% as a scenario. Even when there is a majority, the sentiment of the majority is not always evident in the process.