WestConnect Planning Management Committee

August 27, 2018

Re: June 1st Letter from Transmission Developers and Key Interest Group members

This letter is addressed to the WestConnect Planning Management Committee or PMC, by select members of the Transmission Owners with Load Serving Obligations, TOLSOs ("responders"),[1] in response to the letter delivered to the PMC on June 1st from select Transmission Developers and Key Interest Group members ("authors"). The intent of this letter is to provide a written TOLSO response to the issues brought out by the authors. The role of the PMC is to be open to hear any concerns anyone has of the planning process. The TOLSOs in this letter recommend that the PMC address the issues highlighted in these letters with all members of the PMC.

Foreword

WestConnect's role under FERC Order 1000 is to consolidate TOLSO's data and determine if any regional transmission planning seams issues are created or regional needs identified, then to ensure these concerns are resolved. The recommendations provided by the authors attempt to put WestConnect in a centralized transmission and generation planning position, of which it is neither.

Author Comment #1

First, the ability of each TOLSO to add local transmission projects to solve reliability and possibly economic issues without any criteria for inclusion in the model can mask system needs. There is no requirement that makes a TOLSO accountable to actually build the local project or if they don't, to provide a reason why. A TOLSO can add or remove projects each cycle from the models with little regard to how this may impact neighboring systems. This makes it very difficult to find a regional need since all the problems are taken care of by these proposed local projects. Criteria should be developed for inclusion and removal of local transmission projects in regional models.

Response to Comment #1

This recommendation cannot be met on the basis for the potential of regulatory non-compliance. First, TOLSOs have a responsibility to include local projects in base transmission plan. As described in the BPM[2], "WestConnect's regional base transmission plan will consist of the planned projects identified in the transmission plans developed by the WestConnect TOLSO Members in accordance with Order Nos. 890 and 1000…".[3]

The BPM was developed to align with members' tariffs. The WestConnect utilities with a FERC-approved regional tariff, outlines the process by which WestConnect will develop a Regional Plan, noting specifically, "All WestConnect Transmission Owners with Load Serving Obligations shall be responsible

[1] Signatories of Arizona Public Service, Tucson Electric Power, Salt River Project, with support and agreement from El Paso Electric, NV Energy, Xcel – PSCO, Black Hills, Public Service New Mexico, and Arizona Electric Power Cooperatives.

[2] Section 4.1.10, "Criteria for Including Projects in the Base Transmission Plan" of the WestConnect's Business Practice Manual (BPM).

[3] Discussions related to why projects are added or removed typically occur during Order 890 meetings, WestConnect Stakeholder meeting, or any number of other open meetings where transmission plans are discussed.

for submitting their local transmission plans for inclusion in the Regional Plan[4]…Those individual plans will be included in the Regional Plan base case system models."

Further, removal of local projects without explicit permission would be a tariff violation, "Because local transmission owners are ultimately responsible for compliance with NERC Reliability Standards and for meeting local needs, the local transmission plans will not be modified; however, the PMC may identify more efficient or cost-effective regional transmission projects."[5]

Beyond WestConnect, TOLSOs have legal and regulatory obligations to reliably serve customers within their service territories. To do so, TOLSOs must plan to add local transmission projects to maintain system reliability. Specifically, Transmission Planning Standards, TPL-001 – 4, provides the requirements and framework in which transmission planning studies are performed in the near and long-term planning horizons, the near-term being up to 5 years and the long-term extending out 10 years. The NERC Reliability Standards allow the transmission owner flexibility to satisfy the standards without defining how listed projects are added or removed. As transmission planners perform analyses over time the system will behave different as new projects are added or removed in the system, these changes can have an effect on the timing and need of new projects. Additionally, the local transmission needs are driven largely by local load growth that may be delayed for a variety of factors leading to the possible delay or removal of specific transmission projects. These local transmission projects comprise the bulk of the projects currently in the plan and should not affect the identification of any possible regional needs.

In order to prove that the transmission plan is in compliance with NERC Standards, the removal of a planned project is tested against that Transmission Planning Standards of the Transmission Owner's system as well as the neighboring Transmission Owners. A Transmission Owner cannot simply remove a transmission project if it causes reliability impacts to itself or neighboring Transmission Owners. In fact, R8 of the TPL Standards dictates that the results of the TPL Assessments are shared with neighboring Planning Coordinators and Transmission Planners within 90 days of completing is Planning Assessment.

Author Comment #2

Second, at the May Planning Subcommittee meeting, it was stated that if a TOLSO in the outer years of the 10-year study finds that they are short of resources to meet their load, they can simply add resources into the model with no criteria to guide them. This can be used to mask congestion on the system and/or reliability issues that could otherwise justify a regional project and results in no attempt to see if another TOLSO's footprint has excess resources that could be delivered to the TOLSO area that is short on resources by a regional transmission project. At the very least, a resource inclusion criteria should be established in the WestConnect Planning process that each TOLSO, short on resources, would follow to make sure an appropriate type and location of resource is added to the model.

[4] Per Tucson Electric Powers Open Access Transmission Tariff, Attachment K, Section E.1, last paragraph "Regional Planning Methodology and Protocols; Evaluation and Selection of Solution Alternatives, Overview of Regional Planning Methodology and Evaluation Process"

[5] Per Tucson Electric Powers Open Access Transmission Tariff, Attachment K, Section E.2, paragraph 2 "Regional Planning Methodology and Protocols; Evaluation and Selection of Solution Alternatives, WestConnect Reliability Planning Process"

Response to Comment #2

The responders respectfully disagree with the statement that a TOLSO can add generation without criteria. Each utility plans for changes in its resource mix to meet changes in anticipated load through an integrated resource planning (IRP) process. The governance for these resource plans varies by the type of utility (PUC regulated, municipal, cooperative), but in all cases is open, rigorous, and prescriptive.

Within the IRP process there is nothing that requires individual utilities to first seek resources that may or may not exist in another TOLSO's footprint before a TOLSO adds additional resources into its resource plan, nor should there be. Utilities actively evaluate the most economic and reliable way to serve their customers. Just as with transmission, there are a multitude of factors that will dictate the type and the timing of adding resources into the future utility resource plans including forecasted load growth, fuel prices, technology costs, and system needs.

While the timing and type of these resources may change over time in response to changes in load or other factors, it is not the role of WestConnect to determine the efficacy of utilities' resource decisions, but rather WestConnect should continue to ensure that the Base Case continues to reflect the most recent utility resource plans.

Author Comment #3

Third, that 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 increased constraint analysis, is difficult to fully evaluate the congestion on the WestConnect regional transmission system, because congestion is generally more likely to occur on with these constraints, than on simple constraints not under contingency. Just because there is congestion on an N-1 constraint, it does not mean there is a reliability issue. Rather it means that the constraint may be limiting the system from dispatching the lowest cost generation on the system. It is also possible that a Remedial Action Scheme (RAS) may address a constraint, however it is difficult to know this without considering these constraints. N-1 constraints (and N-2 constraints for common tower/structure lines) should be added to the economic analysis portion of the planning cycle.

Response to Comment #3

Based upon the responders' current understanding of the N-1 constraint analysis, we agree that the idea of including N-1 constraints as a sensitivity should be considered however, we do not agree that the N-1 analysis should be performed on the base case. The responders feel that this topic is currently undergoing discussion within WestConnect regarding the appropriateness of using N-1 constraint analysis, the mechanisms for performing the analysis, and the proper use of the results.

The responders note that this was studied in the previous cycle with no significant impact to the results. Other planning regions within WECC, NTTG and Columbia Grid do not use this method.

The responders feel this discussion should continue to play out.

Author Comment #4

Finally, there was pushback during the May PMC meeting to not take any of the recommendations from the Back cast Study done last year to improve the model output. Since the intent of this study was to improve the quality and establish the credibility of the base modeling of the WestConnect footprint, our feeling is that all the recommendations should be implemented unless a compelling reason can be found to not implement any of them.

For instance, during the May 23, 2018 webinar hosted by Energy Strategies on the "Primer of the Back cast Study", the recommendation to reduce wheeling charges by 50% was discussed. This recommendation improved model accuracy the most and has a straightforward explanation. There are firm and non-firm energy purchases in the energy market. However, all purchases in the model are being charged non-firm wheeling rates, even though firm purchases should generally not be because they often use pre-paid firm transmission service (either through firm transmission payments, transmission line ownership or swapping of firm transmission service). Assuming firm purchases are roughly 50% of total purchases, it makes perfect sense that more accurate model results are achieved when 50% of non-firm wheeling charges are used. We think these issues should be addressed as part of this Biannual Planning cycle and look forward to discussing at future WestConnect PMC meetings.

Response to Comment #4

The Back cast study with adjustments and assumptions such as a 50% wheeling charge was applied, has not produced satisfactory results. The Back Cast study was never formally approved.

The responders agree that lessons learned from the Back Cast study should only be applied to future analyses within scenarios or Base Cases, as appropriate and after careful consideration.