

# **State-Provincial Steering Committee**

## **Expectations for Future WECC Transmission Plans**

**November 30, 2011**

The State-Provincial Steering Committee (SPSC) thanks the Western Electricity Coordinating Council (WECC) for the opportunity to comment on what states and provinces want to see in future transmission plans developed by WECC.

The SPSC comments below are in response to a request by Brad Nickell on October 27 at the SPSC meeting in Monterey, and the WECC stakeholder survey distributed to stakeholders on November 8. We found the November 8 survey questions and format to be an inadequate tool for a large group such as the SPSC to communicate our views about future WECC transmission plans. Accordingly, we provide the following statement in lieu of the survey response.

**Criteria to Judge Transmission Plans.** The SPSC has previously identified three conditions to assess whether a transmission plan provides information relevant to state/provincial decision-makers regarding new transmission. We believe these conditions were applicable to WECC's first 10-Year Plan and consider them equally pertinent to shaping future WECC plans. Specifically, a transmission plan should accomplish the following three conditions:

- Address a robust transmission system over a wide range of plausible futures;
- Identify significant and demonstrable economic efficiency benefits that can be captured through transmission line expansion; and
- Identify transmission additions that if foregone or delayed will result in significantly diminished opportunities to develop infrastructure that would be desirable over a likely range of futures.

**Congestion Analysis.** We find the congestion analysis as having limited value to state and provincial decision makers. The development and use of utilization metrics has been an important and innovative part of the 2010 Study Program and the first 10-Year Plan. However, the congestion metrics by themselves do not provide conclusive evidence to justify investment in new transmission. We believe that economic analysis is more useful than, and should be used in conjunction with, WECC's congestion analysis in assessing the value of transmission expansion.

**Resource Relocation Cases.** We believe WECC's findings on the resource relocation cases and transmission expansion is a critical step towards a regional analysis. We recommend that this type of economic analysis be expanded interconnection-wide for future plans. We believe the economic analysis is more useful than the congestion analysis in developing consensus for likely future generation development and the corresponding demand for transmission expansion.

Towards the end of the last study cycle there were very constructive efforts to add helpful perspective by (1) explicitly identifying which important resource planning criteria were addressed in the resource relocation cases and which were not, and (2) beginning to examine

implications of key uncertainties about transmission costs, quality of accessed resources, changing technology costs, siting and permitting, and integration costs. Such factors should be addressed in future analyses.

**20-Year Plan.** SPSC looks forward to WECC's future use of the Long-Term Planning Tool. We hope this tool will enable us to consider a wider range of futures with the flexibility to explore different policy options. Moreover, we expect the tool to guide us on the identification of cost-effective generation resources and transmission additions to the grid. We are particularly interested in exploring the implications of technological innovations that could significantly impact future transmission expansion.

**Gaps in regional transmission planning.** In previous comments, the SPSC identified a list of 10 items of improvements for the future transmission plans. This list has been revisited, and with some refinement, we believe the list bears repeating in our recommendations to guide future WECC transmission plan.

- 1) Any finding of transmission congestion needs to be coupled with analyses of: (a) whether relieving such congestion could yield reliability benefits; and/or (b) whether transmission expansion on the congested path could generate significant economic benefits.
- 2) WECC's economic analysis of its resource relocation cases and transmission expansion is a critical step towards a regional analysis. We recommend that this type of analysis be expanded interconnection-wide for future plans.
- 3) Modeling improvements are needed to: (a) better simulate DC line performance; and (b) assess the operational impacts of integrating large amounts of variable generation.
- 4) In response to a SPSC 2011 study request covering all analyses of variable resources and to implement item 3 (b) above, WECC should develop a screening tool to evaluate the technical feasibility and cost of integrating large amounts of variable generation.
- 5) It is critical that the transmission planning process have the support of public policy makers. Future studies need to draw conclusions that are relevant to public policy makers and inform the development and pursuit of state, provincial and regional energy policies. The Long Term Planning Tool and 20-year plan should become the resource to test the outcomes of a broad array of possible futures or "what ifs", to inform states and provinces on the likely consequence of major policy options.
- 6) In conjunction with item 5 above, a group of planning experts should be brought together to identify a critical grouping of transmission expansion solutions to be tested against a range of plausible futures with major public policy implications.
- 7) WECC analyses should include consideration of non-wire alternatives (e.g., demand-side management, distributed generation and other non-traditional options).
- 8) WECC should expand its work on evaluating generation and transmission options that lower the cost and risk for consumers throughout the West. This work could include quantifying the effects of geospatial diversity in variable energy generation.

- 9) WECC should expand efforts to test the sensitivity of transmission plan results to changes in generation and transmission cost assumptions.
- 10) Western Governors are leading the development of data related to wildlife sensitivities and water availability to incorporate in the regional transmission planning process. WECC should proactively work with WGA and the SPSG Environmental Data Task Force (EDTF) to ensure that the data bases being developed are effectively incorporated in the regional transmission planning process.