

Comments of the State-Provincial Steering Committee on the Final Draft 10-Year Regional Transmission Plan Summary

August 1, 2011

Introduction

The State-Provincial Steering Committee (SPSC) would like to thank the Western Electricity Coordinating Council (WECC) for the opportunity to comment on the Final Draft 10-Year Regional Transmission Plan Summary (Plan) dated July 18, 2011.

The SPSC submitted extensive comments (12 general comments and 6 specific inserts) dated June 24, 2011 during the stakeholder comment period on the June 6 version of the Plan. We thank WECC for incorporating some of our comments in the latest draft of the Plan. We make this second round of comments during the final public stakeholder comment period to reiterate our concerns that have not been addressed and to propose changes that will improve the final version of the Plan. In brief, SPSC makes the following points:

- The Plan should articulate reasonable criteria to build new transmission. We believe the appropriate criteria should include conditions to maintain reliability or a clear showing that the new transmission yields significant and demonstrable economic efficiency benefits. Congestion analysis is not enough by itself to demonstrate the need for new transmission.
- The Foundational Projects are a key embedded element of the current 10-Year Plan and should be highlighted in the executive summary and observations section. In addition, the Plan should include an appendix that provides comprehensive information about the Foundational Projects.
- The findings of congestion on Montana to Northwest (Path 8) and the Pacific Ties (Paths 65 and 66) lead to WECC recommendations targeting the need for transmission expansion. We do not find the congestion analysis itself demonstrates the need for new transmission on these paths.
- The Plan asserts that RPS compliance beyond the 2020 time horizon will require remote renewable resources that will necessitate additional new transmission. There is virtually no analysis or documentation to support this claim.
- 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.
- We propose a number of items to be added to the list of gaps in Section 4.9.
- We recommend that comments and responses be documented in an appendix to the Plan.

SPSC's comments have been developed prior to the completion of the reliability analysis. For this reason, all comments are conditional and presume there are no reliability issues in the generation and transmission network under the Plan.

SPECIFIC COMMENTS

1. Criteria to judge the merits of the plan

The SPSC has considered what information is important to guide state/provincial decision-makers regarding new transmission. We proposed a three part criteria to judge the merits and usefulness of the Plan. Specifically, we propose inserting following text in Section 2. Introduction, at page 10 line 8, after “. . . environmentally sound”:

In particular, to guide such decisions, the Plan should

- *ensure that our power system is reliable 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.*

2. Foundational Projects in the Plan

The Foundational Projects are a key embedded element of the current 10-Year Plan and should be highlighted in the executive summary and observations section. Recognition of the importance of the Foundational Projects should be included in the executive summary, as part of a summary of key transmission findings in the Plan. The current Plan should also include an appendix that provides comprehensive information about the Foundational Projects:

- (a) In the Executive Summary, at page 3, line 24 insert the following text as the first item in the Executive Summary:

1. Key Transmission Findings

The Foundational Projects were developed early in the planning cycle as a key input assumption in the analysis of the 2020 transmission network, providing the baseline of existing and certain-to-be-built transmission lines on which to model the need for further transmission expansion. The Foundational Projects encompass 44 projects and more than 5,500 line miles - a substantial addition to the Western Interconnection – that are assumed to be built and operating by 2020.

A key insight from the first 10-Year Plan is that beyond the Foundational Projects, which are assumed in the Plan to be built, there is little or no need to build additional

regional scale transmission over the next 10 years to access generation resources to ensure the region meets its load and RPS requirements.

Two transmission paths - Montana to Northwest and the Pacific Tie Paths – merit evaluation for possible upgrades or expansion based on the levels of utilization and congestion found in the Plan’s alternative resource scenarios. These evaluations should consider impacts on reliability, overall system costs and economic benefits, and the interest of buyers in procuring renewable resources that would be delivered over these paths. While there are now efforts underway to consider expansion of lines in these two paths, whether lines will be upgraded or built depends on market participants’ interest in the resources that would be accessed and willingness to undertake the associated transmission investment.

Further, beyond the Foundational Projects and Congested Pathways, Section 4.4 points to potential opportunities to meet utility customer needs at lower cost if lines are built to access remote low-cost renewable resources.

(b) In Section 4.9, at page 68, line 32, add to the list of gaps in the planning process:

6. In future transmission plans adopt a more stringent, objective and consistent set of criteria for identifying projects on the Foundational Project List. Projects on the Foundational Project List should be: (i) under construction, (ii) fully permitted, or (iii) meet other objective criteria that provide a very high level of confidence the project will be built over the 10-year time horizon.

(c) Add an additional appendix that provides comprehensive information about the Foundational Projects including: (i) project line miles; (ii) projects under construction; and (iii) project status in the permitting process.

3. Congested Path Analysis Recommendations

The Plan identifies two major transmission paths (Montana to Northwest and Pacific Tie Paths) with increasing congestion over the next ten years and calls for decision maker action in support of transmission expansion or other congestion relief measures.

After reviewing the combined information on historical and modeled congestion analysis, we find the body of evidence interesting, but it does not provide a conclusive, affirmative demonstration to support new investment in transmission on these two paths. We believe new transmission is warranted if (i) it is needed to maintain reliability or (ii) it yields significant and demonstrable economic efficiency benefits. The congestion metrics relied on so heavily in the analysis of the Plan provides useful information but not conclusive evidence to justify investment in transmission projects.

We believe the WECC’s finding on the Montana relocation case, and other resource relocation cases and transmission expansion cases, are valuable and warrant follow up discussions and analysis. Congestion on major pathways may prevent the realization of

economically efficient generation scenarios by erecting a transmission market barrier which will be difficult to overcome given the long time horizon required for transmission development compared with the shorter time horizon required for the development of particular generation projects. We believe that economic analysis is more useful than and should be used in conjunction with WECC's congestion analysis in developing both interest and consensus regarding likely future generation development and the corresponding value for transmission expansion.

4. Clarify the Determination of “Congestion”

The July 18 Final Draft Plan Summary continues to refer extensively and prominently to congestion on paths, relieving congestion, paths that “remain congested”, and a “considerable amount of congestion”. The development and use of utilization metrics has been an important and innovative part of the studies. However, it should be (and is not yet) made sufficiently clear, early in the Plan Summary what is actually meant by “congestion” in this context, and how it relates to economic losses or inability to deliver desirable (e.g., policy-favored) generation. The first indication of where to look for such explanation is in a footnote on page 32, one-third of the way through the report. Even then, the footnote references an explanation on page 74 in Section 5.1.6, but that explanation does not clearly explain what metrics qualify as “congested” or requiring congestion relief, or how this relates to economic losses and/or actual inability to deliver desirable generation. This should all be more clearly explained, and a summary of this explanation, perhaps a paragraph or two, should be provided early in the report *before* the reader progresses to sections describing various findings and recommendations regarding “congestion” and the importance of relieving it.

5. Section 4.3: Accessing additional renewable resources

The Plan asserts that RPS compliance beyond 2020 may require additional transmission. SPSC observes that there is virtually no analysis or documentation to support this claim. Accordingly, SPSC recommends the following two changes:

- (a) Delete item #3 in the Executive Summary at page 3, lines 35 – 42
- (b) Substitute the paragraph below for Section 4.3, at page 57, line 24:

Attempting to determine what additional renewable energy sources would or should be accessed to meet post-2020 RPS requirements is an open-ended and complex question. While it deserves consideration for the upcoming 20-Year Plan studies, the present 10-Year Plan study cycle has not addressed, let alone resolved the issue.

6. Section 4.4: Cost-effective remote renewable resources

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. However, such analysis must more fully address key cost uncertainties as well as important resource planning criteria and constraints not yet included in WECC's alternative resources analyses.

7. Section 4.9: Gaps in regional transmission planning process

The new Section 4.9 is based in part on the revised discussion in Section 4.6. SPSC had put forth a list of 10 items of improvements for the future, which were not specifically included in the final draft. We believe our original list should be added to the items listed in Section 4.9, at page 68:

- 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) Future studies need to draw conclusions that are relevant to public policy makers. 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.
- 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.

8. Documenting comments on the draft Plan

We believe that the WECC Board and other readers of the Plan would benefit by including an appendix that documents or briefly summarizes written comments received on the draft Plan. This section should include reply comments from WECC. These supplemental comments will help frame the context of the Plan without the necessity of having every stakeholder to agree on precise wording.