SSGwi

October 31, 2003

Chairman Pat Wood III
Commissioner William Massey
Commissioner Nora Mead Brownell

Dear Chairman Wood, Commissioner Massey and Commissioner Brownell:

On behalf of the Seams Steering Group-Western Interconnection (SSG-WI), I am pleased to submit the attached informational filing that follows up on the initial SSG-WI report filed with the Commission on January 7, 2003. This informational filing details the activities of SSG-WI and its six work groups since January 7, 2003. The fundamental goal of SSG-WI on behalf of the western RTO efforts (the California ISO, RTO West, and the WestConnect applicants) is to continue progress toward a seamless western market. While much remains to be done, we feel that progress is being made toward this end in the work products and deliverables described in this filing.

The SSG-WI Steering Committee is very appreciative of the broad-based participation from stakeholder groups, representatives of the states, and Commission staff in the SSG-WI work groups. SSG-WI's progress is due entirely to the commitment of time, energy, and human resources so many engaged parties have provided over the past several months.

We look forward to providing answers to any questions the Commission may have regarding this filing. If it would be helpful to the Commission, the Steering Committee would be pleased to offer additional details about our current and future work in an informational briefing.

Thank you for the opportunity to provide this informational filing.

Sincerely,

/s/

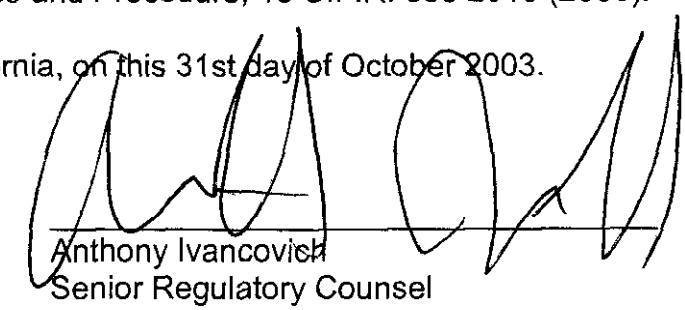
Egil (Bud) Krogh
Chair
Seams Steering Group-Western Interconnection

cc: Majalie R. Salas, Secretary, Federal Energy Regulatory Commission
Jamie Simler
Shelton Cannon
George Godding

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each party designated on the official service list compiled by the Secretary in Dockets No. ER02-1656, RT01-35, RT02-1 and EL02-9 in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. 385 2010 (2003).

Dated at Folsom, California, on this 31st day of October 2003.



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UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

The California Independent System Operator	Docket No. ER02-1656-___
Avista Corporation, Bonneville Power Administration, Idaho Power Company, The Montana Power Company, Nevada Power Company, PacifiCorp, Portland General Electric Company, Puget Sound Energy, Inc., Sierra Pacific Power Company	Docket No. RT01-35-___
Arizona Public Service Company, El Paso Electric Company, Public Service Company of New Mexico, Tucson Electric Power Company	Docket Nos. RT02-1-___ EL02-9-___

INFORMATIONAL FILING OF THE CALIFORNIA ISO, THE RTO WEST FILING UTILITIES, AND THE WESTCONNECT APPLICANTS REPORTING ON ACTIVITIES OF THE SEAMS STEERING GROUP - WESTERN INTERCONNECTION

A. Introduction and Procedural Background.

This informational filing is submitted to the Federal Energy Regulatory Commission (the "Commission") as follow-up to a report (the "Initial SSG-WI Report")[1] filed with the Commission on January 7, 2003 by the California Independent System Operator Corporation (the "California ISO"); the RTO West filing utilities, which consist of Avista Corporation, Bonneville Power Administration, British Columbia Hydro and Power Authority, Idaho Power Company, Nevada Power Company, NorthWestern Energy (formerly the Montana Power Company), PacifiCorp, Portland General Electric Company, Puget Sound Energy, Inc., and Sierra Pacific Power Company; and the WestConnect Applicants, which consist of Arizona Public Service Company, El Paso Electric Company, Public Service Company of New Mexico, and Tucson Electric Power Company.[2] The foregoing parties are referred to in this filing as the "SSG-WI Participants."

The SSG-WI Participants filed the Initial SSG-WI Report in response to instructions from the Commission in various orders and notices[3] related to proposals to form Regional Transmission Organizations ("RTOs") in the West in accordance with

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[1] *See* Report of the California ISO, the RTO West Filing Utilities, and the WestConnect Applicants Concerning Activities of the Seams Steering Group - Western Interconnection, filed with the Commission in Docket Nos. ER02-1656, RT01-35, RT02-1, and EL02-9 on January 7, 2003 (the "Initial SSG-WI Report").

[2] The WestConnect Applicants include only the Commission-jurisdictional public utilities that have participated in the development of WestConnect. The WestConnect Applicants note that the Salt River Project Agricultural Improvement and Power District, the Western Area Power Administration, and the Southwest Transmission Cooperative, Inc. also participated in WestConnect's development.

[3] *See* Initial SSG-WI Report at 2–4 for a summary of the orders and notices to which the Initial SSG-WI Report was responding.

Order 2000[4] and to restructure certain existing markets.[5] The Initial SSG-WI Report set out a proposed work schedule for the highest priority tasks of SSG-WI and its work groups during 2003. This informational filing is to update the Commission on the progress of SSG-WI activities since the Initial SSG-WI Report.

B. Brief Overview of Informational Filing.

The Initial SSG-WI Report described the structure and objectives of SSG-WI, including the Steering Group and the current SSG-WI work groups: the Planning Work Group, the Congestion Management Alignment Work Group, the Market Monitoring Work Group, the Common Systems Interface Coordination Work Group, and the Pricing Reciprocity Work Group.[6] Since they submitted the Initial SSG-WI Report, the SSG-WI Participants have worked, together with other interested parties participating in SSG-WI's open public process, to move forward with the high-priority activities outlined in the Initial SSG-WI Report.[7]

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[4] *Regional Transmission Organizations*, Order No. 2000, 65 Fed. Reg. 809 (Jan. 6, 2000), FERC Stats. & Regs. ¶ 31,089 (1999), *order on reh'g*, Order No. 2000-A, 65 Fed. Reg. 12,088 (Mar. 8, 2000), FERC Stats. & Regs. ¶ 31,092 (2000), *aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish Cty., WA v. FERC*, Nos. 00-1174, et al. (D.C. Cir. 2001).

[5] The California ISO, RTO West filing utilities, and WestConnect Applicants are each making filings in their respective dockets, and are not by this joint filing making filings in each other's dockets. The parties have prepared a joint filing for administrative convenience only. The California ISO is submitting this filing solely in Docket No. ER02-1656. Avista Corporation, Bonneville Power Administration, the British Columbia Hydro and Power Authority, Idaho Power Company, Nevada Power Company, NorthWestern Energy (formerly the Montana Power Company), PacifiCorp, Portland General Electric Company, Puget Sound Energy, Inc., and Sierra Pacific Power Company (collectively the RTO West filing utilities) are submitting this filing solely in Docket No. RT01-35. Arizona Public Service Company, El Paso Electric Company, Public Service Company of New Mexico, and Tucson Electric Power Company (collectively the WestConnect Applicants) are submitting this filing solely in Docket Nos. RT02-1 and EL02-9.

[6] *See* Initial SSG-WI Report at 9–11.

[7] *See id.* at Attachment A.

The Steering Group also recognizes that the context of SSG-WI's activities continues to evolve, both regionally and nationally. There are many uncertainties surrounding the direction of future market reforms, and there are many different views about whether, how, and at what pace the electric industry should evolve from its existing structures and business models. These uncertainties have not diluted SSG-WI's commitment to facilitate a seamless western electricity market, but they have highlighted the need for SSG-WI to remain both cautious and flexible in its approach. Since the Initial SSG-WI Report, the Steering Group has re-focused or re-prioritized some SSG-WI work group activities so that they better reflect the current status of RTO development in the West and make more effective use of SSG-WI resources.[8]

As explained in the Initial SSG-WI Report, the overarching goal of SSG-WI is to facilitate continued progress toward a seamless western market, particularly through supporting the development of the electric infrastructure necessary to foster competitive wholesale electricity markets and efforts to promote an efficient market design process.[9] The Steering Group has coordinated and guided the SSG-WI work groups in pursuit of this goal, striving to promote approaches that will serve the best interests of the Western Interconnection as a whole, not just individual companies or industry sectors.

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[8] For example, while the Common Systems Interface Coordination Work Group's initial charge was to coordinate the market design implementation schedules for RTOs in the West, this is not the best use of the work group's talents at this time. Furthermore, redirecting its immediate focus has allowed the Common Systems Interface Coordination Work Group to engage in national discussions concerning standards development, which are of enormous importance to all system operators in the West. Until the Common Systems Interface Coordination Work Group became involved in this arena, the West did not have a ready means to participate in this forum.

[9] *Id.* at 5.

Central to these efforts are the activities of the SSG-WI Planning Work Group and Congestion Management Alignment Work Group, both of which have made substantial progress on the initial tasks set out for them in the Initial SSG-WI Report. The Planning Work Group met its key goal of developing a regional transmission planning process that furthers the economic expansion of and investment in the West's interstate transmission system, as well as promoting seamless western electricity markets. In addition, the Planning Work Group has produced the SSG-WI Transmission Report – Framework for Expansion of the Western Interconnection Transmission System – October 2003 (the "Transmission Report"). An executive summary of the Transmission Report is included with this filing as Attachment A.[10] The Transmission Report and the regional planning process are described in further detail below in part C.1 of this filing.

The Congestion Management Alignment Work Group has continued to work on the high-priority tasks identified for it in the Initial SSG-WI Report, focusing primarily on assessing the compatibility of the congestion management approaches under development for the three RTOs proposed in the West (the California ISO, RTO West, and WestConnect, which are referred to in this filing as the "Western RTOs"). In particular, the Congestion Management Alignment Work Group has considered the commercial and operational workability of a combination of financial and physical rights schemes, congestion pricing at the seams, modeling of the West's physical transmission

[10] The entire Transmission Report is available through the SSG-WI Website at <www.ssg-wi.com/GeneralWorkGroupDetails.asp?wg_id=3&wg_name=Planning>.

system for transmission scheduling and management, and core elements of a seamless western electricity market.

The Market Monitoring Work Group has focused on its primary task of developing options related to a West-wide market monitoring function, and brought a proposal regarding its structure, roles, and characteristics to the Steering Group on October 17, 2003.[11] The Market Monitoring Work Group has also developed a proposal concerning confidentiality of and access to data for market monitoring. At its October 17, 2003 meeting, the Steering Group reaffirmed its general support for the Market Monitoring Work Group's efforts and directed it to continue work to refine its proposal for implementing a West-wide market monitoring function.

The Common Systems Interface Coordination Work Group has adjusted its work schedule to reflect the pace of development among the Western RTOs. It has focused its efforts since the Initial SSG-WI Report on working collaboratively with the Congestion Management Alignment Work Group to develop recommendations for creating a single point of access for transmission customers to obtain service across the Western Interconnection. The Common Systems Interface Coordination Work Group is also working to identify (and participate in North American efforts related to) "best practices" that could provide technical means and standards for seamless reliability and business interaction across the West's wholesale electricity markets.

[11] The materials discussed by the Steering Group on October 17, 2003 are available on the SSG-WI Website at <www.ssg-wi.com/GeneralWorkGroupDetails.asp?wg_id=1&wg_name=Market%20Monitoring>.

The Pricing Reciprocity Work Group has made significant progress on the high-priority tasks it identified for the first three quarters of 2003, which included gathering and evaluating data on how the Western RTOs (or their constituent transmission owners) currently collect revenue from interregional transactions.

In addition to the specific work group activities highlighted above, SSG-WI representatives have attended joint meetings organized among the existing and proposed RTOs in North America. During 2003 there have been two well-attended meetings, on June 8 and October 7, and another meeting is planned for January 8 and 9, 2004. SSG-WI representatives continue to meet periodically with members of the Committee on Regional Electric Power Cooperation (CREPC) and the Western Electric Coordinating Council (WECC) to enhance collaboration and cooperation with these organizations, so that all three entities' activities are complementary, rather than overlapping or duplicative.

C. More Detailed Description of Informational Filing Elements.

Attachment A to the Initial SSG-WI Report included a summary of the high-priority tasks planned for each of the SSG-WI work groups during 2003. Attachment B to this filing sets forth the same information, with additional text in bold font inserted to describe the progress that has been made on these initial tasks as of the end of the third quarter of 2003. The sections that follow provide highlights of the work groups' accomplishments to date.

1. SSG-WI Planning Work Group.

a. *Highlights of Planning Work Group Activities*

The Initial SSG-WI Report identified the following items as high-priority tasks for the Planning Work Group:[12]

- Develop a process to identify transmission projects that are needed for economic reasons to facilitate a competitive and seamless West-wide wholesale electricity market.

- For projects that: (1) would have a direct effect on more than one RTO, (2) are developed by sponsors outside of the Planning Work Group planning process, and (3) seek cost recovery from Western RTO ratepayers, SSG-WI will develop a process to evaluate whether the projects are justified (necessary and cost effective).

- Determine if and how SSG-WI will support implementation of projects recommended by the Planning Work Group.

- Develop a regional process to resolve differences about transmission interconnections so that parties can avoid going to the Commission under the process set forth in sections 210 and 211 of the Federal Power Act.

- Submit SSG-WI Western Interconnection Transmission Plan to the Western RTOs.

The Planning Work Group has addressed all of these tasks and presented its conclusions concerning the first four tasks in its report entitled "SSG-WI Planning Process." The Steering Group approved this document on August 5, 2003.[13] The Planning Work Group more recently completed work on its initial Transmission Report,

[12] *See id.* at 16–17 and Attachment A.

[13] *See* "SSG-WI Planning Process" dated August 5, 2003, posted on the SSG-WI Website at <www.ssg-wi.com/GeneralMoreDocuments.asp?wg_id=3>. As explained in the Initial SSG-WI Report, the next step in the SSG-WI approval sequence would be to submit the Planning Work Group's conclusions to the Western RTOs for their approval. *See* Initial SSG-WI Report at 9–11.

which the Steering Group approved on October 17, 2003 for submission to the Western RTOs.

b. *Highlights of Transmission Planning Study Report*

The Transmission Report builds on a report prepared for the Western Governors' Association in August 2001 entitled "Conceptual Plans for Electricity Transmission in the West" (the "WGA Report"). The WGA Report noted that changes in the nature of the electric industry had "uncoupled the historical linkages between new generation development and transmission construction,"[14] and that there had not as yet developed alternative industry approaches to compensate for this fundamental change. The Transmission Report makes a valuable contribution to reestablishing the linkage between generation development and transmission construction.

The Transmission Report presents an assessment for a base case of 2008, which includes transmission and generation infrastructure that is reasonably certain to be in place at that time. The report then examines transmission needs for 2013 using average load forecasts projected against a set of "bookend" generation development scenarios, as well as varied assumptions concerning the region's hydro conditions and prices for natural gas.[15] Perhaps the most significant conclusion the Transmission Report offers is that there are some additions to the western transmission system that preliminary analyses

[14] *See* WGA Report executive summary at 3, available on the Internet at <www.westgov.org/wga/initiatives/energy/transmission_rpt.pdf >.

[15] Generation scenarios for the 2013 studies were chosen intentionally to highlight potential differences in transmission implications for distinct resource types and locations. The Planning Work Group did not attempt to choose a projected future generation mix based on expectations of what was likely to occur (which might have suggested using intermediate, rather than "bookend" scenarios).

indicate would make sense under a wide range of differing generation scenarios. The Transmission Report's analyses also provide valuable insights into transmission additions that can support resource diversity and offer the potential of improved reliability.[16]

The Steering Group recognizes that the greatest value any transmission planning effort can produce is positive results—to create a foundation for action that benefits the region and its electricity consumers. While SSG-WI itself does not have the authority or the resources to sponsor transmission construction, it can help illuminate the pathway to meaningful action and can act to catalyze follow-up on West-wide and subregional planning activities. The Steering Group acknowledges that many significant barriers to investment in transmission expansion remain, which must be addressed and resolved if the West is to realize appropriate electric infrastructure development. Many of these barriers relate to cost allocation, cost recovery, and the siting and permitting process.

With this understanding, the Transmission Report identifies next steps designed to help the region capture the practical benefit of the work embodied in the Transmission Report. These next steps build on the Transmission Report's analytical framework, which looks at the western transmission system in its entirety, rather than in fragments dictated by political boundaries or facility ownership. Significant additional work will be needed to identify the specific facilities that would best support the region's interests, as viewed through multiple dimensions of policy and economic considerations. The Transmission Report, combined with SSG-WI's ongoing transmission planning process, provide a solid foundation from which this work can proceed.

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[16] No studies were performed to quantify potential reliability improvements.

c. *How the Transmission Planning and Expansion Study Work and Resulting Report Were Completed*

The Transmission Report reflects great effort over many months, relying on voluntary contributions of SSG-WI Participants' employees, interested stakeholders from across the West, representatives of state regulatory commissions and energy agencies, and the support of consultants engaged by the Western RTOs. An open, inclusive public process enabled the participants to cooperatively develop the analytical approach and modeling assumptions; to collect, organize, and run appropriate data through the study models; and to evaluate and draw conclusions from the modeling.

The Planning Work Group established three objectives to guide its work on the Transmission Report:

1. To identify opportunities where the development of additional power transmission facilities could further facilitate competitive and efficient markets;

2. To provide policymakers with information about transmission impacts of various energy policies being considered by state, provincial, and federal entities; and

3. To identify for generation developers major transmission additions that might be needed to deliver a wide range of generation resources to load.

The Transmission Report documents the results of analyses based on western power system conditions in two future years: 2008 and 2013. The 2008 study, which was designed to act as a base case for comparing 2013 results, included analyses of a range of hydro conditions and gas prices projected against an average load forecast to ascertain how these parameters affected study results. The 2008 study provides a benchmark for a 2013 load forecast by identifying congestion problems that are likely to exist before the addition of new resources and transmission posited for the 2013 studies.

The 2013 studies looked at three possible approaches to future generation development, which were intended as conceptual "bookends." These were used to evaluate the transmission infrastructure that would be needed to support each of the assumed future generation mixes. The three approaches were:

a. A gas-fired scenario that assumed 86 percent of new generation would be fueled with natural gas and located near load centers;

b. A coal scenario that assumed 66 percent of new generation added between 2008 and 2013 would be coal-fired; and

c. A renewable energy scenario that assumed that 72 percent of new generation added between 2008 and 2013 would be from renewable resources. The renewable energy scenario contains enough renewable energy generation to satisfy the renewable portfolio standards that four states within the Western Interconnection have enacted.

Like the 2008 study, the 2013 study includes analyses based on an average load forecast measured against low, average, and high hydro conditions and a number of price ranges for natural gas. These study results, combined with broad estimates for capital costs of new generation and transmission infrastructure, indicate that the benefits associated with these infrastructure improvements yield simple payback periods ranging from approximately six to 13 years depending on assumptions about gas prices and hydro conditions. The study results also indicated that transmission benefits were more sensitive to the price of natural gas than to hydro conditions because of how much of the generation (over 25%) expected to be added by 2008 is fueled by natural gas.

As noted above, a planning framework based on a system-wide perspective can provide a great deal of useful information about areas that may warrant more detailed and comprehensive analyses. Because some future transmission infrastructure needs were

common to all of the assumption sets, the Transmission Report also points to how further efforts might be logically prioritized.

d. *Summary Description of SSG-WI Planning Process*

Another important accomplishment of the Planning Work Group during 2003, which was reflected in the development of the Transmission Report, was to define a consensus process for SSG-WI planning activities. The SSG-WI planning process, which was approved by the Steering Group on August 5, 2003, contemplates an open, collaborative effort involving all interested stakeholders. It relies not only on the Planning Work Group, but on subregional planning groups (such as those that currently exist in the Northwest, the Desert Southwest, the Rocky Mountain region, and California), the WECC, and the Western RTOs.[17] The SSG-WI planning process identifies the responsibilities of each of the different contributors and their relationships to each other, and also envisions active cooperation and consultation with appropriate state, provincial, and tribal regulators and siting and environmental agencies.

The Planning Work Group intends that the process it developed and used to produce the Transmission Report will continue in the future to address western transmission expansion issues. The joint efforts of the organizations, subregional groups, and stakeholders engaged in the SSG-WI planning process will identify and develop plans for expansion of the western interconnected transmission system. SSG-WI will focus on higher-level West-wide needs. The Planning Work Group plans to develop

[17] The Planning Work Group recognizes that RTO West and WestConnect are not yet operational, but the subregional planning groups will help fill this planning need until all of the Western RTOs are operational.

future transmission reports on an annual basis. The role of the subregional planning groups (and RTOs as they become operational) will be to perform more in-depth planning studies that both feed into and build from the West-wide perspective at the SSG-WI level.

At this stage of SSG-WI's development, the Planning Work Group has recommended various types of technical support for transmission projects identified through the SSG-WI planning process. The Western RTOs are expected to develop their own planning functions. This in turn may lead to a reconsideration of the role SSG-WI should play in implementation of projects that the planning process finds have West-wide benefits.

2. SSG-WI Congestion Management Alignment Work Group.

The overarching focus of the Congestion Management Alignment Work Group is to anticipate and offer strategies for mitigating any operational or commercial inefficiencies that might result at the interfaces among the Western RTOs because of differences in their approaches to congestion management. The Congestion Management Alignment Work Group has approached this challenge from the perspective of maintaining, as far as possible, the basic attributes of each RTO's congestion management model.

One of the Congestion Management Alignment Work Group's efforts during 2003 has been to analyze whether a mixed model of physical and differing financial rights is manageable for both system operators and transmission users. Although the analysis is not yet complete, the work group's results to date indicate that a mixed model can be made to work.

The Congestion Management Alignment Work Group has also begun work on assessing whether, if redispatch is used to manage congestion at the interfaces among the Western RTOs, it is necessary to have a single set of congestion clearing prices across the seams. There is general agreement within the work group that there should be a single set of prices, whether generated explicitly by a locational pricing congestion management scheme or as an iterative step in a physical rights congestion management scheme (or perhaps some combination of the two). The Congestion Management Alignment Work Group is working to develop mechanisms by which prices across the three Western RTOs can be converged in a day-ahead market. The work group has not yet addressed other markets (such as hour-ahead, real-time, etc.).

In evaluating whether the Western RTOs can employ physical models of the western transmission system that differ in the degree of detail they provide, the Congestion Management Alignment Work Group has reached general agreement. It has concluded that each of the RTOs should use a single, relatively detailed physical model of the entire interconnection for its scheduling and congestion management activities. Although each RTO may enhance the basic model to include additional internal detail for transmission elements that do not affect or are not affected by external transactions, the work group believes that the common model should accurately reflect the impact of each RTO's transactions on flows across all significant paths in the interconnection.

Finally, in its ongoing work to develop consensus on the core elements of a seamless western electricity market, the Congestion Management Alignment Work Group has broadened its initial objective. The work group now seeks to identify not only the core elements, but to describe a mechanism that will enable the Western RTOs to

create a seamless market while maintaining the characteristics of their own market designs as filed with the Commission. As part of this more ambitious undertaking, the Congestion Management Alignment Work Group has been collaborating with the Common Systems Interface Coordination Work Group through a task group (the Single Market Interface Task Group). The Single Market Interface Task Group's goal is to develop straw proposals for implementing a single market interface that will enable transmission customers, on a day-ahead basis, to schedule transmission on and bid into markets operated by the three Western RTOs with a single pass ("one-stop shopping"). The task group has identified approaches for incorporating energy trading hubs into the Western RTOs' congestion management schemes as part of its straw proposal development process.

3. SSG-WI Market Monitoring Work Group.

On October 17, 2003, the Market Monitoring Work Group presented to the Steering Group a proposal for a West-wide market monitoring function to be carried out through a West-wide "umbrella" market monitoring entity. The proposal contemplates an independent, West-wide market monitoring entity that would monitor West-wide wholesale transmission markets operated by the Western RTOs and related market activity. The umbrella entity would coordinate closely with local market monitoring units (those responsible for monitoring markets within individual Western RTOs) and would rely in the first instance on the local units' work product concerning local RTO markets.

The Market Monitoring Work Group's proposal outlines the general roles of the umbrella entity, including its reporting relationship to the Commission; to state,

provincial, Mexican, and local regulatory, oversight, and enforcement agencies; and to the Boards of Directors of the Western RTOs. The proposal does not provide for the umbrella entity to have mitigation or enforcement authority, but it would be able to monitor market participants' compliance with applicable Commission- and RTO-imposed mitigation measures where they have implications for the seams among the Western RTOs.

After discussing the Market Monitoring Work Group's proposal, the Steering Group adopted a resolution in which the Steering Group:

- Reaffirmed its support for the development and implementation of a West-wide market monitoring function;
- Supported further development and definition of the "umbrella" proposal set forth in the Market Monitoring Work Group's October 17 recommendations; and
- Directed the Market Monitoring Work Group to further explain and develop the issues identified in the Steering Group's discussion.

There were numerous areas that the Steering Group identified for further Market Monitoring Work Group attention, including: clearer delineation of the relationship between the umbrella market monitoring entity and RTO market monitoring units; giving the umbrella entity access to appropriate data without creating additional reporting burdens for market participants; access to data by regulators in a manner that protects confidential information; procedural safeguards governing investigations undertaken by the umbrella entity; creating an appropriate balance between the umbrella entity's independence and its accountability to those that provide its funding; and how the umbrella entity should be funded. These are illustrative examples of the issues the Steering Group asked the Market Monitoring Work Group to address; the Steering

Group's directions to the Market Monitoring Work Group covered a wide range of additional issues.[18]

The Marketing Monitoring Work Group intends to respond promptly to the Steering Group's instructions. The Market Monitoring Work Group's next action will be to meet jointly with representatives of CREPC and the Commission's Office of Market Oversight and Investigations on November 4, 2003. The expected topics at this meeting include further discussion of the Marketing Monitoring Work Group's current market monitoring proposal, status of market monitoring discussions between the Commission and CREPC members, and state issues related to market monitoring.

4. SSG-WI Common Systems Interface Coordination Work Group.

As noted in the highlights of the Congestion Management Alignment Work Group's activities above, the Common Systems Interface Coordination Work Group has co-sponsored the Single Market Interface Task Group to develop a straw proposal for a single market interface for transmission service and market participation across the three Western RTOs. The work to date has been mainly conceptual. The Single Market Interface Task Group initial focus has been to build a strong foundation for future work by gaining a clear understanding of what parties will be served through the single market interface and what functions will be required to meet the needs of both market participants and system operators.

[18] The complete list of issues the Steering Group asked the Market Monitoring Work Group to address is available on the SSG-WI Website at <www.ssg-wi.com/documents/311-10.28.03_Status_of_Market_Monitoring_Work_Group.doc>.

The Common Systems Interface Coordination Work Group also began work on business process modeling as scheduled in the Initial SSG-WI Report. The work group's focus in this area has been on the settlement process and on actively reviewing and commenting on proposals developed through the Electronic Scheduling Collaborative. A subgroup originally set up under the Common Systems Interface Coordination Work Group, the Business Architecture Development Group, has recently become a free-standing work group under SSG-WI, with a goal to improve consistency of transaction processes and terminology among the Western RTOs.

There are other important aspects of the Common Systems Interface Coordination Work Group's initial scope, particularly implementation and simulation coordination, that will become more active as development activities of the Western RTOs progress in the future. The work group has created a prioritized work plan that addresses multiple aspects of enabling the Western RTOs to operate seamlessly. Each element of the work plan will be carried out as appropriate to fit the development of the Western RTOs.

5. SSG-WI Pricing Reciprocity Work Group.

The Pricing Reciprocity Work Group has moved forward with the work designated for the first three quarters of 2003. On April 7, 2003, the work group completed and posted on the SSG-WI Website a high-level comparison of the pricing proposals for each of the Western RTOs.[19] In August 2003, the work group concluded the process of compiling, checking, and coordinating one month's data on transactions

[19] This high-level comparison is available on the SSG-WI Website at <www.ssg-wi.com/GeneralWorkGroupDetails.asp?wg_id=4&wg_name=Price%20Reciprocity>.

across the seams between the Western RTOs (the month selected was September 2002). Based on its evaluation of this initial data, the Pricing Reciprocity Work Group concluded that it would be appropriate to collect data related to an entire year's worth of transactions across the RTO regions in the West, and is proceeding with this effort.

Since the Commission issued its April 28, 2003 White Paper on Wholesale Power Market Platform, the Pricing Reciprocity Work Group decided to revisit the four reciprocity options it had previously developed in light of the White Paper. In that process, the work group refined some of the options and also added a variation on one of the options.

The Pricing Reciprocity Work Group also completed one of the items designated for the fourth quarter of 2003: definitions of evaluation criteria to be applied to each of the pricing reciprocity options it develops. Definitions for four evaluation criteria (eliminate trade barriers between RTOs, mitigate cost shifts, equal treatment, and simplicity) were posted on the SSG-WI Website[20] on April 7, 2003. The Pricing Reciprocity Work Group expects to continue efforts to further define options (including advantages and disadvantages), further develop evaluation criteria, compile data needed to evaluate the options in the coming months, and identify issues related to pricing seams with and services offered to parties that are not RTO participants.

[20] <www.ssg-wi.com/GeneralWorkGroupDetails.asp?wg_id=4&wg_name=Price%20Reciprocity>.

6. Participation in North American ISO/RTO Markets Committee.

As noted in the overview to this filing, SSG-WI representatives have worked actively not only within the Western Interconnection, but in broader arenas as well. In particular, they have attended joint meetings of the existing and proposed RTOs in North America through an *ad hoc* ISO/RTO markets committee.

At least one high-level operations representative from each existing or proposed ISO or RTO in North America attended the ISO/RTO markets committee's second meeting on October 7, 2003. Among the areas the committee may explore in future meetings are: coordination with other seams-related organizations (such as the North American Energy Standards Board and the Standards Review Committee of the ISO/RTO Council); approaches to a wide range of market operation issues, such as credit and billing procedures, handing financial losses, day-ahead congestion management, forward markets, hubs, and trading exchanges; market monitoring issues, resource adequacy (particularly through capacity markets); and tools for market design simulation.

The SSG-WI Participants believe that coordination and information-sharing among the ISOs and RTOs in North America has tremendous value. SSG-WI intends to participate in and strongly support future activities of the ISO/RTO markets committee.

D. Conclusion.

As this informational filing illustrates, the SSG-WI Steering Group and work groups continue to move forward on the high priority items identified in the Initial SSG-WI Report. The SSG-WI Participants appreciate the opportunity to update the Commission on what the SSG-WI process has accomplished to date.

Respectfully submitted,

SIGNATURES

DATED the 31st day of October 2003

THE CALIFORNIA ISO CORPORATION

/s/

By: Elena Schmid
Vice President, Corporate
and Strategic Development

THE RTO WEST FILING UTILITIES:

AVISTA CORPORATION

/s/

By: Randall O. Cloward
Director, Transmission Operations

BONNEVILLE POWER ADMINISTRATION

/s/

By: Allen L. Burns
Executive Vice President
Industry Restructuring

BRITISH COLUMBIA HYDRO AND
POWER AUTHORITY

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By: Yakout Mansour
Senior Vice-President
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IDAHO POWER COMPANY

/s/

By: James L. Baggs
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NORTHWESTERN ENERGY

/s/

By: Ted D. Williams
Director, Transmission Marketing

PACIFICORP

/s/

By: John Carr
Managing Director, Major Projects

PORTLAND GENERAL ELECTRIC

/s/

By: Stephen R. Hawke
Vice President, System Planning
and Engineering

PUGET SOUND ENERGY, INC.

/s/

By: Kimberly Harris
Vice President, Regulatory Affairs

NEVADA POWER COMPANY and
SIERRA PACIFIC POWER COMPANY

/s/

By: Carolyn Cowan
Executive Director, Transmission Policy
and Operations

THE WESTCONNECT APPLICANTS:

ARIZONA PUBLIC SERVICE COMPANY
EL PASO ELECTRIC COMPANY
PUBLIC SERVICE COMPANY OF NEW MEXICO
TUCSON ELECTRIC POWER COMPANY

/s/
By: Charles Reinhold
WestConnect Project Manager

E. List of Attachments.

Attachment A – Executive Summary to SSG-WI Transmission Report – Framework for Expansion of the Western Interconnection Transmission System – October 2003

Attachment B – Summary of Progress on High-Priority SSG-WI Work Group Activities Since January 7, 2003.0

Attachment A
to
Report of the California ISO, the RTO West Filing Utilities, and the WestConnect Applicants Concerning Activities of the Seams Steering Group - Western Interconnection

Executive Summary
SSG-WI Transmission Report
Framework for Expansion of the Western Interconnection Transmission System
October 2003

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SSG-WI[1] Transmission Report
Framework for Expansion of the Western Interconnection Transmission System
October 2003

I. Executive Summary

The Western Energy Crisis of 2001 raised a number of concerns regarding the impact of changes in the electricity industry on resource and transmission adequacy. The Western Governors' Association's (WGA) August 2001 report entitled, *Conceptual Plans for Electricity Transmission in the West*, recognized that the changing electrical industry regulatory structure has "uncoupled the historical linkages between new generation development and transmission construction" with no new industry structure to enable the construction of necessary transmission yet in place.

It is assumed that the three proposed western regional transmission organizations (RTOs) will eventually provide mechanisms to promote the construction of needed transmission infrastructure within their service areas. The SSG-WI Planning Work Group (PWG) was established to provide a forum to further the development of a robust West-wide interstate transmission system, an important pre-requisite for a seamless electricity market. Sub-regional transmission planning processes have also been established to facilitate transmission planning and expansion for specific geographic areas within the Western Interconnection (WI).

This report presents results from studies modeling transmission system congestion in the WI in 2008 and 2013 under different illustrative load and generation scenarios and assuming the dispatch of generation with the lowest operating costs first. The studies do not address transmission needed to maintain system reliability, to mitigate local market power problems, nor to optimize transmission/generation expansion. These studies were performed to identify West-wide transmission needs for a range of possible futures and possible options to meet these needs.

The establishment of the SSG-WI PWG, the development of these studies and the initiation of Sub-regional Planning Groups represent implementation of several important next steps identified in the WGA report along the continuum toward construction of critical transmission infrastructure. (See Figure E-3)

[1] Seams Steering Group of the Western Interconnection (SSG-WI) is a voluntary alliance of representatives of the three RTOs and other stakeholders from the Western Interconnection (WI), whose purpose is to facilitate a seamless Western Market.

Study Objectives

The studies were performed to meet the following three objectives:

1. To identify opportunities where the development of additional power transmission facilities could further facilitate competitive and efficient markets.

2. To provide policy-makers with information concerning transmission impacts of various energy policies being considered by State, Provincial and Federal entities.

3. To identify for generation developers major transmission additions that could be necessary to deliver a wide range of generation resources to load.

The 2008 study is considered the base case and only includes generation and transmission infrastructure reasonably certain to be in place by 2008. The 2008 study includes analyses under an average load forecast; low, average and high hydro conditions and a number of price ranges for natural gas. The 2008 study provides a benchmark for a 2013 load forecast by identifying congestion problems likely to occur if new resources and transmission are not developed.

The 2013 study evaluates the following three generation scenarios that are assumed to represent the bookends of possible generation infrastructure development in the 2013 timeframe.

- A gas-fired scenario that assumes 86 percent of new generation is fueled with natural gas and located near load centers;

- A coal scenario that assumes 66 percent of the new generation added between 2008 and 2013 is coal-fired; and

- A renewable energy scenario that assumes that 72 percent of new generation added between 2008 and 2013 is from renewable resources. The renewable energy scenario contains enough renewable energy generation to satisfy the Renewable Portfolio Standards that four states within the Western Interconnection have enacted.

As with the 2008 study, the 2013 study includes analyses under an average load forecast; low, average and high hydro conditions and a number of price ranges for natural gas.

Findings

A comparison of the average hydro and medium gas price condition in the 2008 study with a similar study of an unconstrained transmission system (see Figure V-I in the report) indicates that there is significant stranding of low-cost generation in Canada and in the Desert Southwest. Approximately 1300 miles of new 345 and 500 kV line would be required to completely alleviate this identified congestion, which could result in an annual savings in the production cost of generation, or Variable Operating and Maintenance (VOM) costs, totaling at least $110 million. One of the Sub-regional Planning Groups, the Southwest Transmission Expansion, or STEP Group, is already undertaking a more detailed investigation of upgrading existing lines and adding approximately 225 miles of new transmission line in the California-Arizona corridor. STEP estimates the benefit of this proposed project to be on the order of $60 million per year.

The study did not explicitly model the impact of measures to reduce demand. However, the study results do provide insights into the effect of load reduction on the need for transmission. In addition, the study shows that the need for new transmission is more sensitive to the price of natural gas than to hydro conditions, primarily because new generation added in the WI between 1998 and 2008 is predominantly natural gas-fired with over 25% of generation resources in 2008 fueled by natural gas.

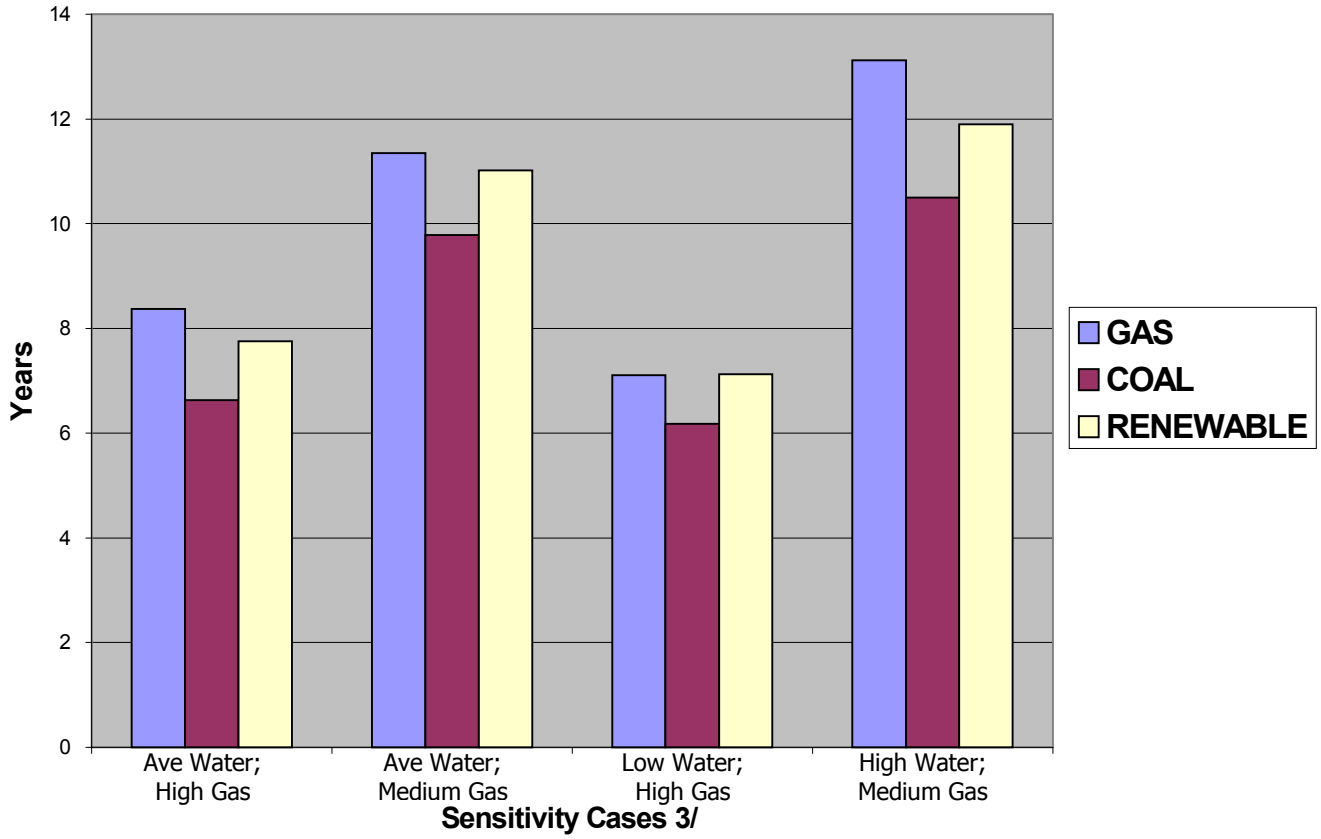
Figure E-1 shows the results of the 2013 scenarios in terms of the costs, benefits, and simple payback periods associated with constructing new transmission and generation infrastructure compared to the benchmark case of no new infrastructure. As shown, a cursory evaluation of the capital costs of transmission and generation infrastructure was performed. The benefits in terms of production cost savings (VOM cost savings) are derived from the model results. Such costs as the cost of additional gas pipeline infrastructure or the costs associated with potential carbon emission regulation have not been evaluated. Benefits stemming from reliability improvements, improved market competition and increased ancillary services have also not been quantified. Although the study results should not be construed to mean that a particular scenario is cost-effective to construct because there is a need for more detailed analyses, the results do show simple payback periods of 6 to 13 years for the range of scenarios and sensitivities studied. Expected generation/transmission scenarios for the various WI sub-regions merit further evaluation, including the consideration of non-transmission alternatives such as demand reduction measures.

The new transmission infrastructure assumed to be in place by 2013 under each of the scenarios to facilitate the efficient use of generation to meet load is graphically shown in Figure E-2. The underlying system represents that which would be operational by 2008.

Figure E-1: SSG-WI Study Results for 2013 Scenarios

	GAS	COAL	RENEWABLE
New Transmission (Miles)	1325	7600	3360
New Transmission Costs ($B)	2.64	16.74	6.71
New Generation (Installed GW)	57	57	67
New Generation Costs ($B)	17.44	30.51	36.76
Production Cost Savings for Sensitivity Cases ($B/yr) 1/			
• Average Water; High Gas	2.40	7.13	5.60
• Average Water; Medium Gas	1.77	4.83	3.94
• Low Water; High Gas	2.83	7.65	6.10
• High Water; Medium Gas	1.53	4.50	3.65

Simple Payback Periods for 2013 Scenarios 2/



1/ Production Cost Savings are evaluated compared with a base case of 2008 resources & transmission.
2/ Simple Payback is defined as sum of all capital costs divided by total annualized benefits.
3/ Other factors to consider before investment decisions are made include: fuel availability/resource diversity, construction lead time, transmission losses, environmental impacts/benefits, benefits to transmission/generation reliability, impacts on market competitions, ancillary services impacts/benefits, etc.

Accomplishments in Meeting Study Objectives

This report is an important step in meeting SSG-WI's transmission planning objectives and makes a valuable contribution to reestablishing the linkage between generation development and transmission construction.

STUDY OBJECTIVE 1: IDENTIFY TRANSMISSION INFRASTRUCTURE TO FACILITATE MARKETS:

In furtherance of SSG-WI's first objective, the studies identify:

- Areas in the Western Interconnection that are or may be congested in the near future (2008); and

- Transmission facilities necessary to minimize production costs for three bookend generation scenarios;

Given the load and resource assumptions, these expansions of the transmission system are cost-effective. Further analysis is required before specific projects can be selected for construction.

Solutions are being investigated in sub-regional planning forums. Sub-regional transmission assessments can define specific projects, identify the beneficiaries of such projects, and create the coalition of interests necessary for transmission infrastructure implementation. An iterative transmission planning process has been defined. The iterative process includes annual studies by the SSG-WI planning function and detailed investigations by the Sub-regional Planning Groups and the RTOs (once they are formed). All of these activities will be coordinated with state entities and local utilities performing integrated resource planning. (See Figure E-3, for a graphical depiction of this process.)

The SSG-WI planning effort is currently based on the voluntary support of interested stakeholders. Given the diverse makeup of the Western Interconnection, a large number of individual transmission owners and other interested parties are involved in this effort. This approach to planning transmission can be successful; however, implementing the projects that are planned can be difficult because of the many interests involved. The development of RTO's is expected to significantly mitigate this barrier, as the RTO's will have processes that not only facilitate planning, but also fund and construct new transmission.

STUDY OBJECTIVE 2: IMPACT OF ENERGY POLICY ON TRANSMISSION:

In furtherance of SSG-WI's second objective, the PWG:

- Finds that planning and implementation of transmission and generation infrastructure are difficult to coordinate because transmission infrastructure generally takes significantly longer to develop than generation infrastructure.

- Identifies transmission expansion that would relieve congestion for the coal, gas and renewable generation scenarios evaluated. (See Figure E-2)

- Finds that the transmission needed with the Renewable Scenario will support the amount of renewable energy generation necessary to satisfy the Renewable Portfolio Standards (RPS) that four states within the Western Interconnection have enacted. [2] Since the renewable generation levels in the Renewable Scenario exceed the RPS requirements, additional studies may be required to identify the minimum transmission required by the state RPS levels.

- Identifies transmission expansion that might lower electricity costs to consumers based on the preliminary economic analyses performed.

Energy policy-makers are currently faced with a number of issues and uncertainties that are tied directly or indirectly to transmission infrastructure development. National energy legislation may be forthcoming soon that addresses such issues as mandatory reliability standards, regional transmission organizations and electricity market designs.

In addition to transmission infrastructure adequacy, energy policy-makers are concerned with resource adequacy and diversity. A number of states within the Western Interconnection have enacted energy legislation that includes RPS, energy efficiency, environmental and other requirements. Following the Western Energy crisis of 2001, a number of states and regions are exploring whether to implement resource adequacy requirements. In addition, state regulators and load serving entities (LSEs) have renewed their efforts to perform integrated resource planning evaluations.

The scenario analyses performed by SSG-WI can help inform state policy-makers and regulators of the cost of transmission associated with alternative generation sources. This is valuable input into integrated resource planning activities, resource adequacy assessments and other evaluations being performed to address the issues identified above. These analyses are particularly valuable in providing insights into transmission additions that can support resource diversity and thus improve reliability. Conversely, the transmission infrastructure development process, graphically depicted in Figure E-3,

[2] It is unclear whether the RPS requirements in the various states apply only to new, or also include existing renewable resources. The SSG-WI studies assumed that only new renewable resources count toward satisfying RPS requirements.

depends on input from states, LSEs and developers. Transmission planning must be integrated with utility and independent developer plans in sub-regional studies in order to arrive at solutions for transmission and generation infrastructure that fully support the goals of energy policy-makers. Finally, detailed analyses of the impact of transmission additions on system reliability need to be conducted.

OBJECTIVE 3: IDENTIFY TRANSMISSION NEEDED TO DELIVER RESOURCES TO MARKET:

In furtherance of SSG-WI's third objective, the PWG finds:

- Gas-fired resources require significantly less new transmission since these resources are generally located near load centers.

- Significant transmission additions are required to transmit remote coal and renewable resources identified in the study to load centers. The results of this initial screening are promising in terms of identifying potentially cost-effective additions for the assumed resources scenarios.

- The transmission facilities identified for all of the scenarios may also provide reliability benefits for the WI power system.

- Certain transmission facilities were found to be needed in all three resource scenarios. Since the need for these facilities is less sensitive to resource assumptions, the sub-regional planning groups may want to focus first on these facilities as possible economic additions to the system.

As part of this initial study effort, a WI production-costing database has been developed. SSG-WI intends that this database be made available for use by the Sub-regional Planning Groups and others interested in joint database development. A beneficial and effective relationship has been established between the SSG-WI PWG and the western Sub-regional Planning Groups. These consensus-based efforts should be supported and encouraged to continue. These efforts will be expanded to include RTOs, once these are formed.

Next Steps

The following steps are proposed to advance transmission development in the Western Interconnection:

- Federal, State and local policy-makers need to address and resolve institutional and financial barriers[3] to the construction of needed transmission infrastructure. These issues include transmission line siting, cost allocation and cost recovery. These issues need to be resolved to encourage investment in transmission infrastructure and demand efficiency measures at loads.

- The Sub-regional Planning Groups should perform more in-depth transmission expansion planning studies for those facilities within their sub-regions identified in this SSG-WI study, based upon expected generation additions and load forecasts (e.g. coordinated with utility integrated resource plans that are approved by state public utility commissions);

- SSG-WI should perform annual reviews of the utilization of the existing transmission system, potential future needs, and expansion issues, including those issues associated with differences in transmission and generation construction lead times. SSG-WI should coordinate its future study program with the Sub-regional Planning Groups. SSG-WI should initiate long-term planning efforts and identify appropriate cost and benefit indicators for future analysis, including fuel price volatility, fuel availability, environmental impact, ancillary service impacts, construction lead times, losses, reliability improvement and impacts on market competition.

- Development and funding of model and economic methodology improvements and forums to improve transmission planning methodologies need to be investigated and pursued. For example, study methodologies (particularly benefit calculations) need to be fine-tuned and improvements are needed to more accurately model hydro and wind resources as well as market behavior. A process for continuing the development of a common, public and consistent database needs to be finalized.

- Federal, state and local policy-makers will need to decide whether to finance and permit transmission expansions to facilitate generation resource diversity, including meeting renewable energy goals in RPS's.

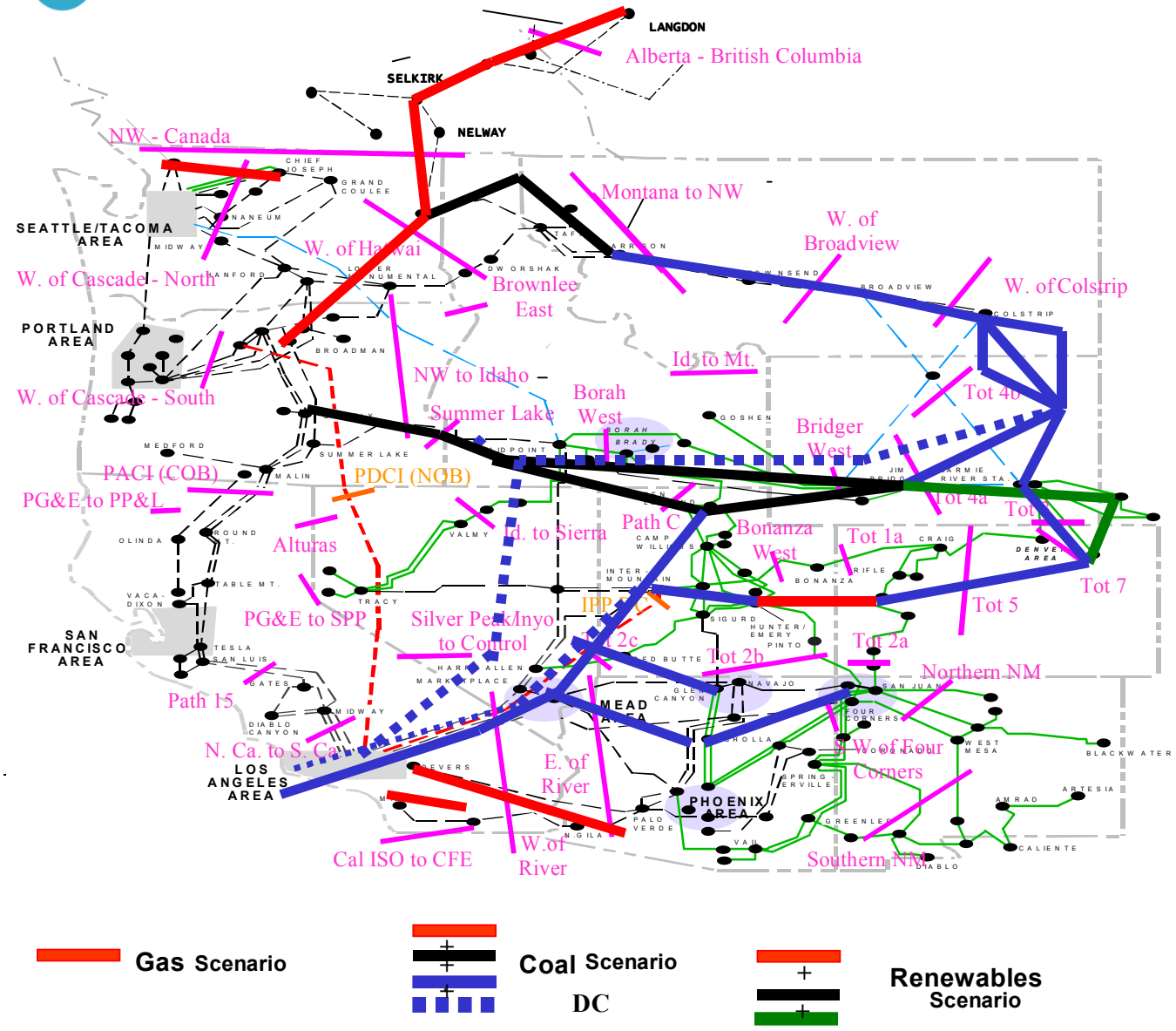
- As Sub-regional Planning Groups perform detailed studies to identify beneficiaries and as incentive pricing and cost recovery issues are addressed and resolved, coalitions of interested parties will need to come together to plan, finance and construct critical transmission infrastructure. The development of RTOs will likely be critical to making mechanisms available to fund and construct new transmission infrastructure.

[3] Barriers exist that impede not only the construction of transmission lines, but also that impede demand-side technologies, including strategically sited generation, to delay or obviate the need for new transmission lines.

Figure E-2 Western Interconnection Transmission Additions

Seams Steering Group of the Western Interconnection

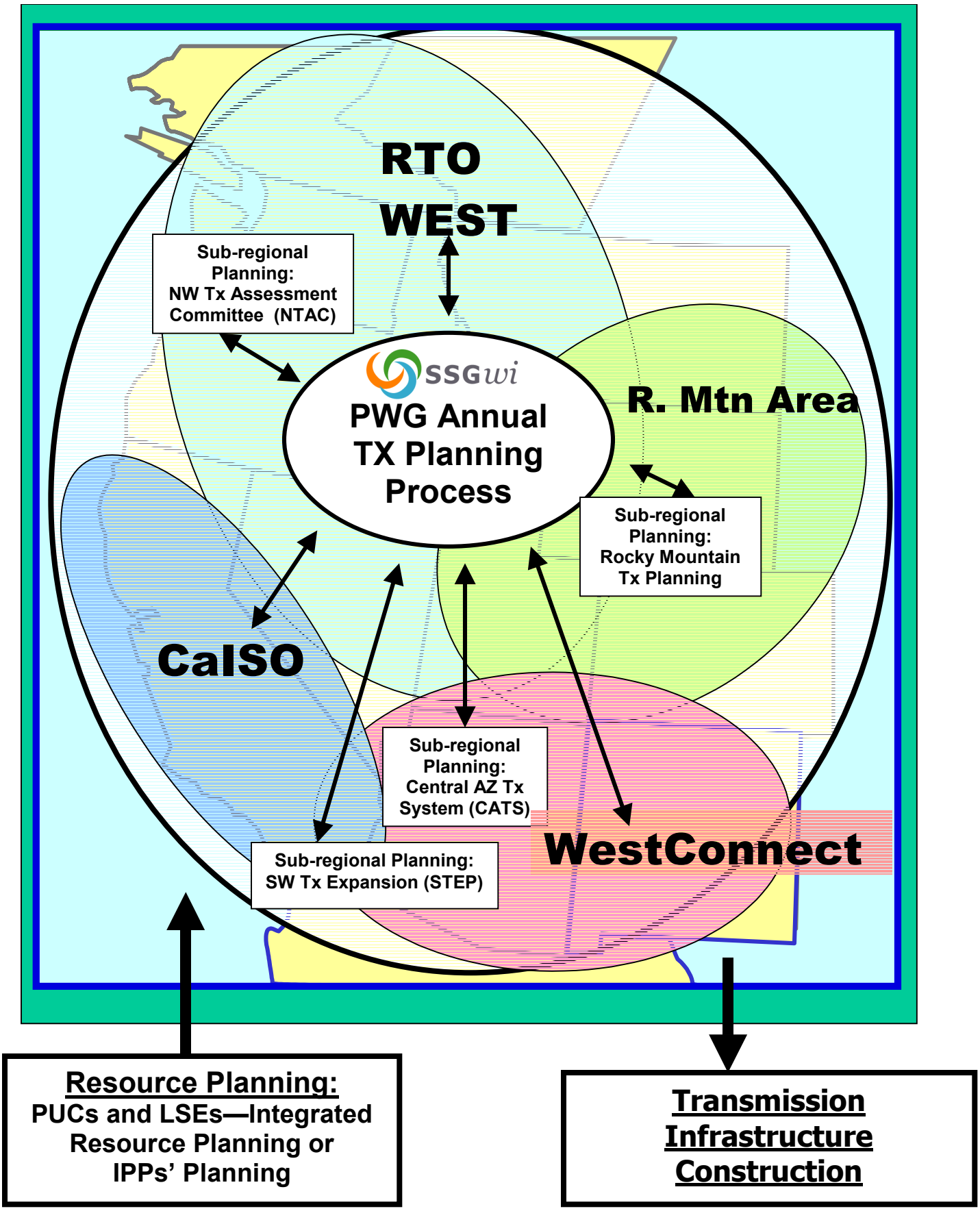
Western Interconnect Transmission Paths



1	Alberta-BC
2	Alberta – Saskatchewan
3	Northwest – Canada
4	West of Cascades – North
5	West of Cascades – South
6	West of Hatwai
7	Blank
8	Montana to Northwest
9	West of Broadview
10	West of Colstrip
11	West of Crossover
12-13	Blank
14	Idaho to Northwest
15	Midway – Los Banos
16	Idaho – Sierra
17	Borah West
18	Idaho – Montana
19	Bridger West
20	Path C
21	Arizona to Calif
23	Four Corners 345/500
24	PG&E – SPP
25	PacifiCorp/PG&E 115 Intercon.
26	Northern – Southern Calif
27	Intermountain Power Project
28	Intermountain – Mona 345 kv
29	Intermountain – Gonder 230 kv
30	TOT 1A
31	TOT 2A
32	Pavant/Intermtn Gonder
33	Bonanza West
34	see paths 78 & 79
35	TOT 2C
36	TOT3
37	TOT 4A
38	TOT 4B
39	TOT 5
40	TOT 7
41	Sylmar to SCE
42	IID – SCE
43	North of San Onofre
44	South of San Onofre
45	SDG&E Comision Fed. de Elect.
46	West of Colorado River (WOR)
47	Southern New Mexico (NM1)
48	Northern New Mexico (NM2)
49	East of the Colrado River
50	Cholla – Pinnacle Peak
51	Southern Navajo
52	Silver Peak – Control 55 kv
53	Billings – Yellowtail
54	Coronado West
55	Brownlee East
56-57	Blank
58	Eldorado – Mead 230 kv Lines
59	WALC Blythe – SCE Blythe

Attachment A – Page 9 – Executive Summary to SSG-WI Transmission Report –
Framework for the Expansion of the Western Interconnection Transmission System – October 2003

Figure E-3: Transmission Infrastructure Development Process



Attachment B
to
Report of the California ISO, the RTO West Filing Utilities, and the WestConnect Applicants Concerning Activities of the Seams Steering Group - Western Interconnection

Summary of Progress on High-Priority SSG-WI Work Group Activities Since January 7, 2003

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Summary of Progress on High-Priority
SSG-WI Work Group Activities Since January 7, 2003

Purpose: The purpose of this document is to provide a high level summary of the progress made by SSG-WI Work Groups on major SSG-WI deliverables. Status reports have been inserted to describe progress on each high-priority objective.

To facilitate understanding of this document, the following abbreviations are used:

***CMAWG** – Congestion Management Alignment Work Group*

***PWG** – Transmission Planning Work Group*

***MMWG** – Market Monitoring Work Group*

***CSIC** – Common Systems Interface Coordination Work Group*

***PRWG** – Price Reciprocity Work Group*

1st Quarter - 2003

- **MMWG – High Priority**. Develop and detail options for the Steering Group to consider (as part of forming a recommendation to the Western RTOs) related to whether the West-wide market monitoring function should be structured around a single, primary market monitor for the Western RTOs' markets, or if this function can be performed by an umbrella or coordinating body that monitors for seams issues.

Status: **The MMWG developed and detailed the three structure options for the West-wide market monitoring function, and decided on an "umbrella" approach. The Steering Group considered the MMWG's proposals on October 17, 2003 and adopted a resolution that 1) reaffirms its support for the development and implementation of a West-wide market monitoring functions; 2) supports further development of the "umbrella" proposal; and 3) directs the MMWG to further explain and develop issues identified in the Steering Group discussion.**

- **CSIC** - Propose implementation plans for seams-related systems and processes.

Status: **While proposals for several systems related to seams have been developed, further work to create specific implementation of these plans needs to be synchronized to the development activities of the proposed RTOs in the West.**

- **CSIC** - Examine other systems as appropriate.

Status: **CSIC sponsored, in conjunction with the SSG-WI Congestion Management Alignment Work Group (CMAWG), the formation of the Single Market Interface (SMI) task group. This group is developing the basis for a single point of access for market participants to gain the use of transmission in the interconnection, and applicable market activity, with a single pass. Work has focused thus far on understanding the participants and the needed characteristics of the single market interface. Work is targeted, but not yet underway, to identify a methodology for making three (or more) dissimilar markets and non-RTO participants work seamlessly together in one interface.**

CSIC has developed and prioritized a plan for on-going work. The present focus is on the single market interface (noted above), participation in and development of requirements and protocols for data communications between and external to RTOs, and possibly to address joint training and operator certification.

- **PRWG** - Identify applicable existing charges and proposed charges applied to various transactions.

Status: **COMPLETED**

The PRWG developed a high-level comparison of pricing proposals and charges for the California ISO, WestConnect and RTO West. The pricing and charges comparison was completed and posted to the PRWG page of the SSG-WI website on April 7, 2003.

- **CMAWG – High Priority**. First report on progress of work group on the high level technical tasks described below:
  - **CMAWG – High Priority**. Analyze whether a mixed model of physical and differing (options versus obligation-based) financial rights, including their scheduling implications, is manageable for both system operators and users, and whether it allocates transmission efficiently;

    Status: **This is the overall, ongoing problem being addressed by the CMAWG. All activities have this as the end goal. So far, the analysis indicates that the mixed model can be made to work, but the analysis is continuing and not yet complete.**

  - **CMAWG – High Priority**. Determine whether, to the extent redispatch is required or used to manage congestion, it is necessary to have a single set of congestion clearing prices across the seams so that no inter-RTO barriers to

trade or arbitrage opportunities result, and if so, how the RTOs can assure it. Establish whether this requirement extends to multiple products such as ancillary services, as well as redispatch for congestion clearing, and to both day-ahead and real-time markets;

Status: **There is general agreement that a single set of prices is needed for congestion management at the seams, whether generated explicitly by a locational pricing congestion management scheme or as a step in a physical rights congestion management scheme. The CMAWG is developing the mechanism by which these prices from the three RTOs can be converged in the day-ahead market. The CMAWG has not yet addressed other markets.**

- **CMAWG – High Priority**. Evaluate whether there is a way to allow differing granularity for the physical system model used by each Western RTO for its internal and its external calculations (internal to one is external to the others) or whether a single equally detailed physical model is required for each RTO.

Status: **There is general agreement that a single, relatively detailed physical model of the entire interconnection should be used by each RTO. The model should accurately reflect the impact of transactions in any single RTO on flows on all significant paths in the interconnection. Each RTO may have a version that adds additional internal detail for transmission elements that do not affect or are not affected by external transactions.**

2nd Quarter - 2003

- **CSIC -** Implementation coordination (helping the Western RTOs keep current with and take into consideration each other's systems implementation processes).

Status: **CSIC attempted to collate implementation plans for the three proposed RTOs but found it impractical in view of the re-evaluation of design, phasing, and implementation schedules of the RTOs forming in the West.**

- **CSIC -** Simulation coordination (helping the Western RTOs develop process simulation approaches that take into account approaches of neighboring RTOs and avoid gaps in the simulations).

Status: **This will be delayed until there is sufficient definition of designs and implementation plans between the forming RTOs.**

- **CSIC** - Business process modeling (identify opportunities to improve consistency among the Western RTOs with respect to transaction processes and terminology).

Status: **Work began on schedule to develop a framework for building and refining business processes. CSIC has focused on the settlement process and actively participated in review and comment on the Electronic Scheduling Collaborative Use cases. The Business Architecture Development Group (BAD) has been established as one of the primary SSG-WI work groups.**

- **PRWG** - Collect data and analyze the financial implications on the current/proposed processes for collecting revenues related to interregional transactions.

Status: **A data collection task group of the PRWG compiled, checked and coordinated one month of data about transactions between the three current/proposed RTO regions. This effort for September 2002 test data was concluded in August 2003. The PRWG evaluated the data and decided that the test data demonstrated that it was worthwhile to collect transaction data between the RTO regions for an entire year.**

The data collection task group is now proceeding with collecting twelve months of transaction data for the time period June, 2002 through May, 2003; the group agreed to seek information on all imports and exports by MW and to separate out by line item (if possible) the existing transmission contracts, as well as losses or other separable data. The PRWG is determining if other data are needed to evaluate the range of price reciprocity options.

- **MMWG – High Priority**. Develop an initial proposal regarding confidentiality of and access to data.

Status: **The MMWG developed general principles regarding confidentiality and access to information as reflected in its October 17th proposal. The MMWG did not resolve the question of state access to information, although no one is proposing to limit the states' current rights to access market monitoring data and work product. The Commission currently has before it the California ISO's filing regarding its proposed regulatory server (Amendment 55), and this filing involves all of the data questions raised by the MMWG. While the Commission's decision will not reach beyond California, the MMWG believes that the Commission's eventual order will assist the MMWG in developing a proposal regarding state access to information.**

- **PWG – High Priority**. Develop a process to identify transmission projects that are needed for economic reasons to facilitate a competitive and seamless West-wide wholesale electricity market.

Status: **COMPLETED**

The SSG-WI Planning Process is described in the document "SSG-WI Planning Function and its Interactions within the Western Interconnection," approved by the SSG-WI Steering Group on August 5, 2003 posted to the PWG page of the SSG-WI website.

The SSG-WI Planning Process includes an annual study program, an identification of system needs and economic projects, preparation of a SSG-WI Transmission Report, and dissemination of information to stakeholders.

- **PWG – High Priority**. For projects that: (1) would have a direct effect on more than one RTO, (2) are developed by sponsors outside of the Planning Work Group planning process, and (3) seek cost recovery from Western RTO ratepayers, SSG-WI will develop a process to evaluate whether the projects are justified (necessary and cost-effective).

Status: **CONCLUSION REACHED**

The PWG considered this issue and recommended that, because the requested assistance may vary from situation to situation, the process response to these projects should be customized to the particular need and the detailed requirements determined at that time. This was approved by the SSG-WI Steering Group on August 5, 2003.

The PWG expects that few projects will meet the criteria described in this issue. Most projects will be more appropriately addressed through one or more of the RTOs. Whether SSG-WI undertakes additional detailed studies and assessments, as well as the nature of these studies and assessments, will be determined by SSG-WI and the entity requesting help. Factors used in these studies, such as metrics, standards, and criteria will be determined at that time on a case-by-case basis.

- **PWG – High Priority**. Determine if and how SSG-WI will support implementation projects recommended by the Planning Work Group.

Status: **COMPLETED**

The SSG-WI Steering Group approved the recommendations of the PWG on August 5, 2003. It was decided that SSG-WI will provide support for projects by:

- **Indicating that the proposed project would serve a need identified by PWG studies;**
- **Indicating that the sponsor was active within the planning process;**
- **Indicating that the project might prove useful to the region such as increasing Transfer Capability and relieving congestion;**
- **Making SSG-WI models available for others' use;**

- **Providing technical analysis and support if requested by the sponsor;**
- **Upon request of a project sponsor or state siting agency, supporting the siting process.**

SSG-WI expects the existing processes to evolve to reflect an increasing planning role for the RTOs.

- **PWG – High Priority.** Develop a regional process to resolve differences about transmission interconnections that will enable parties to avoid going to the Commission under the process set forth in sections 210 and 211 of the Federal Power Act.

Status: **CONCLUSION REACHED**

Following review of this issue, the PWG recommended that existing processes in the West and future RTO processes would adequately address this issue. The SSG-WI Steering Group approved this recommendation on August 5, 2003.

The RTOs will apply their own procedures to resolve RTO to RTO differences, including differences in interconnection requirements. SSG-WI will serve as the forum to facilitate resolution of these differences. For interconnections between RTO members, interconnection issues will be addressed in accordance with the procedures of each RTO. Where a decision involves an entity that is not a member of an RTO, interconnection decisions relating to that entity will be made by that entity in conjunction with the affected RTO.

- **CMAWG – High Priority**. Second report on progress of work group on the high level technical tasks described under "1st Quarter" above.

Status: **The CMAWG continued work on priority projects described under 1st Quarter and completed and posted both a first and second quarter report to the SSG-WI.**

3rd Quarter - 2003

- **PWG** – **High Priority**. Develop SSG-WI Western Interconnection Transmission Plan.

Status: **COMPLETED**

The Transmission Report summarized in this filing completes this task. In the future, reports will be prepared on an annual basis.

- **PRWG** - Finalize development of options for price reciprocity.

Status: **During the second and third quarters, the PRWG revisited and refined the four options it had earlier developed and added a**

variation on one of the options. The refined descriptions of the options will be completed during the fourth quarter and ready for analysis once the evaluation data is compiled.

- **CMAWG – High Priority**. Develop a consensus proposal concerning the "core elements" of a seamless Western electricity market. This effort will build off of the work previously done through the Western Electricity Coordinating Council (the "WECC") and will clarify which elements of the western market need only to be compatible and those that need to be standardized.

Status: **The CMAWG is working on a proposal that goes well beyond describing the core elements of a seamless market. It is working on developing a description of the process by which the market can be made seamless, while maintaining the distinctive characteristics of the three RTOs' filed market designs. This process is not complete, but is more ambitious than originally proposed to the Commission.**

As part of this description, the CMAWG has also agreed on the need for a single market interface (SMI), going beyond current OASIS functions, between RTOs and market participants and among the RTOs. Work on the SMI concept is being shared between CMAWG and CSIC through a new work group.

Also as part of this description, the CMAWG has described a mechanism for incorporating energy trading hubs into the RTO congestion management schemes.

- **CSIC –** Participate in developments related to market interface requirements, protocols and implementation.

Status: **CSIC is identifying key forums for development of market interface requirements and protocols with the intent of participating in these broad-based efforts in order to learn from and implement them in the west where possible.**

4th Quarter - 2003

- **PRWG** - Develop proposals for addressing pricing seams with and services offered to non-participants.

Status: **As the PRWG completes the descriptions of the price reciprocity options, the group at the same time is identifying issues related to pricing seams with and services offered to non-RTO participants.**

- **PRWG** - Develop assessment criteria, consider available pricing options, and identify suggested alternative.

Status: **The PRWG developed and agreed on definitions of evaluation criteria. Definitions of four criteria were posted to the PRWG page of the SSG-WI website on April 7, 2003.**

The PRWG is continuing to add further definition to the options and collect the data necessary to evaluate the options. The PRWG has re-evaluated its timeline and concluded a realistic target for developing a suggested price reciprocity alternative for the SSG-WI Steering Group's consideration is during the second quarter of 2004 after the evaluation data are collected and compiled.