
Seams Steering Group – Western Interconnection --- *An Update* ---

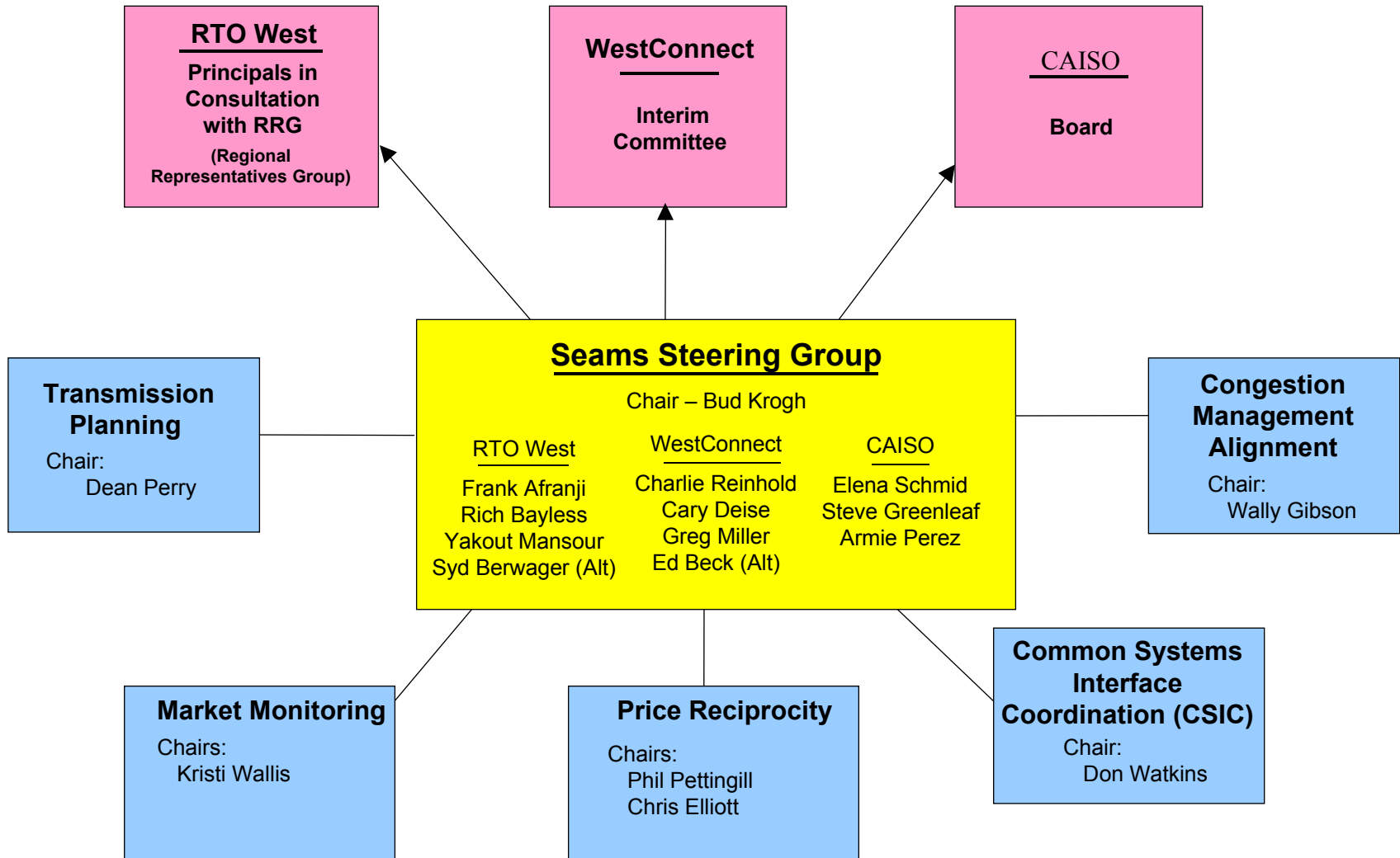
*Presentation to the
Federal Energy Regulatory Commission
January 29, 2003*

Seams Steering Group-Western Interconnection (SSG-WI)

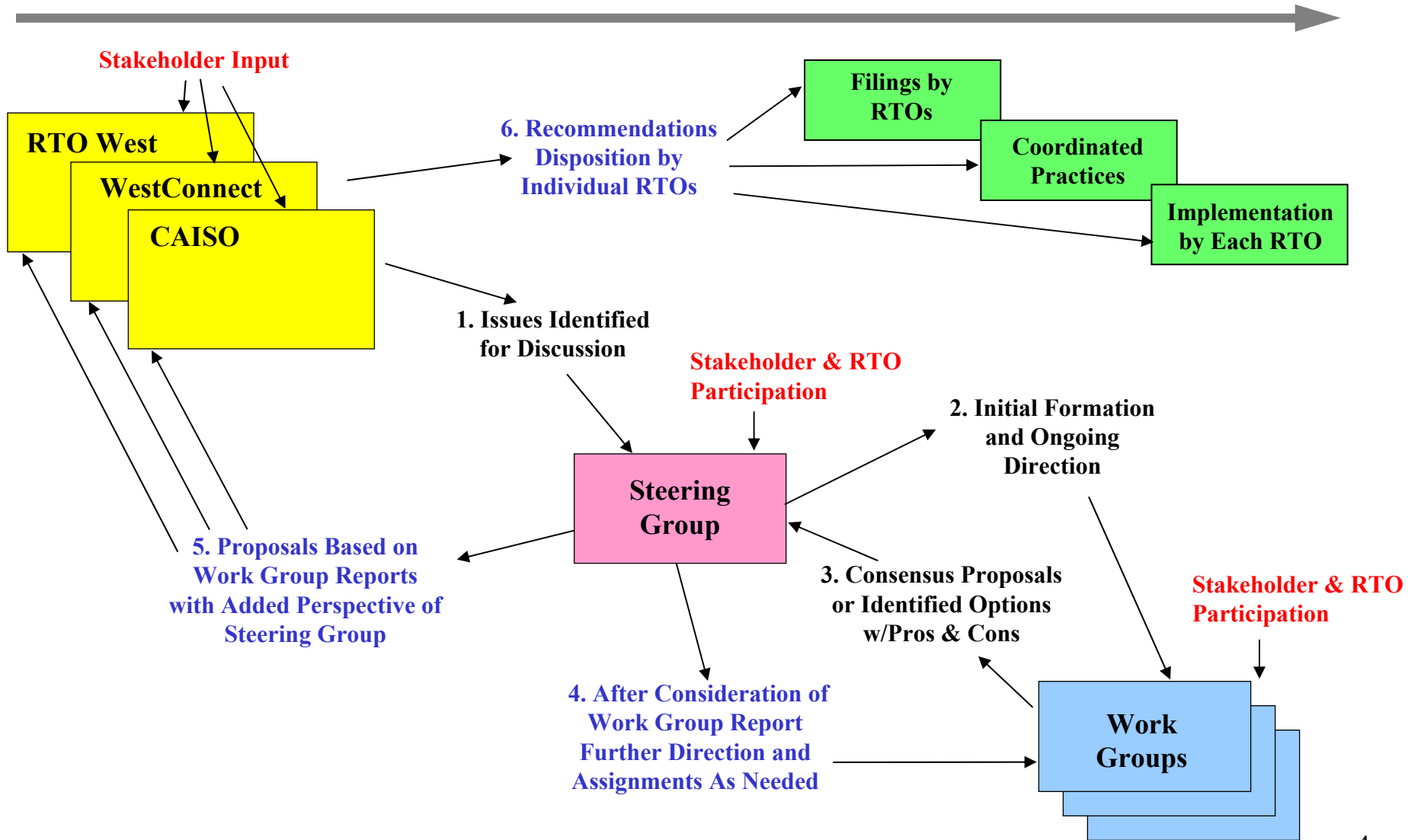
Background:

- SSG-WI is a functioning “Seams” discussion forum for the Western RTOs.
- Representation – RTO West, WestConnect and CAISO.
- SSG-WI Structure – Three RTOs, one seamless market, individual RTO accountability – RTO Governing Boards have final decision-making authority.
- Three RTOs executed a memorandum of understanding (MOU) on December 5, 2002 to codify their commitment to the SSG-WI process.

Organization Chart



Process Chart



“Making It Work”

Practical Considerations:

- Long history of finding West-wide solutions --Loop Flow & Phase Shifters, RTG Formation, etc.
- Inherent feedback between SSG-WI and RTOs, i.e., the same people working both processes.
- Sizable non-jurisdictional transmission assets in the West.

What We Need from FERC:

- Flexibility in approach.
- Assistance in issue resolution.

Stakeholder Participation

- All SSG-WI Work Groups are open to stakeholder participation.
- The first open meeting of the Steering Group was January 21, 2003; approximately 50 in attendance in addition to the members of the Steering Group.
- Stakeholder representatives are submitting proposals for their ongoing participation in the Steering Group (proposals will be posted on the SSG-WI website).

Summary of RTOs' January 8th

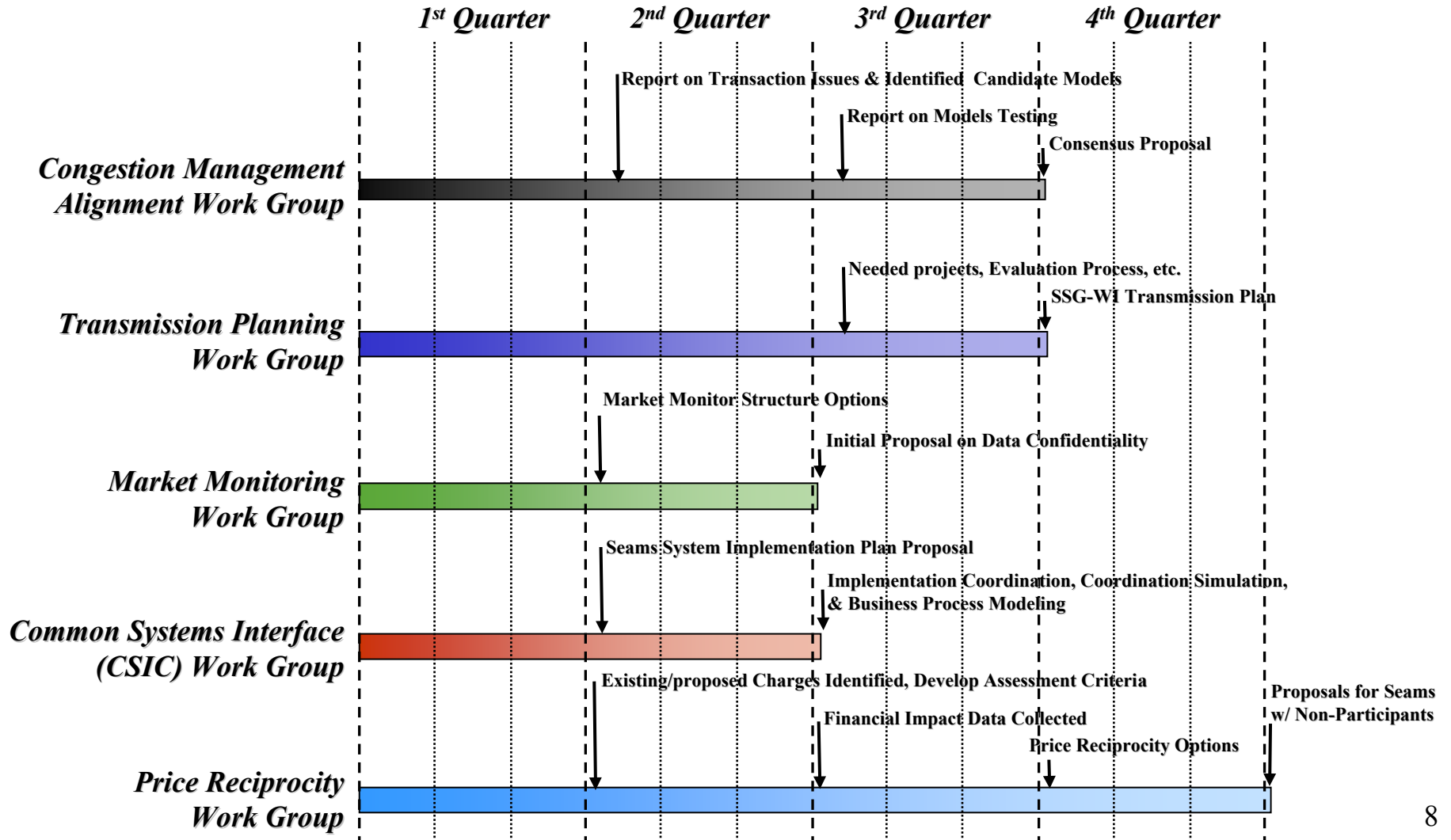
Report Filing about SSG-WI

Purpose: To identify seams issues being addressed by SSG-WI and to detail SSG-WI's work plan and timetable for addressing those issues.

Elements of Filing:

- Reiterated and emphasized SSG-WI construct: SSG-WI does not have final decision-making authority.
- Summarized MOU and coordination with states.
- Summarized and detailed current activities and 2003 deliverables of SSG-WI Work Groups.
- Summarized other important considerations.

Milestones for 2003



Sequencing Development

- Formation of the three Western RTOs offers the best opportunity to develop a seamless Western market.
- The primary focus in the West is for each Western RTO to complete its own market design.
- As these market design efforts are proceeding, the West has an opportunity to avoid future seams difficulties by addressing potential problems during the development process.
- As market design in each RTO proceeds, seams issues are being identified and referred to the SSG-WI process for consideration and development of proposals for resolution.
- Informed by the SSG-WI discussions, the three Western RTOs will determine how to best address seams issues and achieve a seamless market within the context of their individual market designs.

Congestion Management Alignment Work Group

Purpose:

To eliminate seams issues associated with the Western RTO congestion management models by identifying and proposing solutions to those seams issues that would hinder the efficient operation of a seamless Western market.

Congestion Management Alignment Work Group



Framework:

- FERC conditional approval of differing congestion management approaches.
- In seeking to eliminate or mitigate seams issues, will attempt to maintain, as far as possible, basic attributes of each RTO's model.

Goal:

- Develop detailed consensus proposal on core elements of seamless Western market, building on earlier work.

Congestion Management Alignment Work Group

High Level Assessment:

- 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.
- 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.
- 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.

Congestion Management

Alignment Sub-Groups

Scheduling:

- Step through scheduling process with two examples; transactions, from rights acquisition through settlements, focusing especially on day ahead to real time.
- Highlight incompatibilities and areas where the proposals work together.

Modeling:

- Simplified modeling to simulate price calculations and evaluate approaches to handling transactions at the seams.
- Evaluate modeling granularity issues.

Transmission Planning Work Group

Purpose:

To provide a forum to further the development of a planning process that is:

- Proactive,
- West-wide in scope,
- Supported by states, generators, transmission providers and customers, and
- Implemented prior to RTO formation.

Transmission Planning Work Group

Key Products to date:

- Developed an initial proposal on a regional transmission planning process.
- Initiated development of detailed long-term planning studies, based in part on earlier Western Governors' Association (WGA) efforts, to identify necessary transmission expansion projects.

Transmission Planning

Work Group

Key Tasks:

- Develop a process to identify transmission projects that are needed for economic reasons to facilitate a competitive and seamless West-wide wholesale electricity market.
- Develop a process to evaluate whether the projects are justified (necessary and cost effective).
- Determine the circumstances in which, and how, SSG-WI will support implementation of projects recommended by the Planning Work Group.
- Develop a regional process that avoids the need to resolve disputes at FERC.

Market Monitoring Work Group



- The Market Monitoring Work Group has developed a recommendation for a single West-wide market monitoring entity to monitor the three Western RTO markets and satisfy the Order 2000 market monitoring requirements for each of the Western RTOs.

Market Monitoring Work Group

- The Steering Group has reconfirmed that all three Western RTOs share a common goal of establishing a West-wide market monitoring *function*, but requested that the Work Group supplement its recommendation with additional options regarding the structure of the market monitoring function.

Market Monitoring Work Group

The following areas of consensus will likely be unaffected by the addition of new structure options:

- Market monitoring function will be independent:
 - Western RTO Boards will not act as screen for market monitor's reports to the Commission; and
 - Market monitor will have direct relationship with the Commission.

Market Monitoring

Work Group

- Market monitor will actively monitor appropriate markets.
 - If market monitor identifies market performance that is inconsistent with competitive markets, it will evaluate further to determine cause (including the activities of all market participants including transmission providers and the RTOs) and report its results to the Commission.
- Market monitor will evaluate market design and, after consultation with RTO staff, will recommend market design and rule changes.
- Market monitor will monitor compliance with FERC-imposed mitigation measures and RTO-designed, FERC-approved mitigation measures.

Market Monitoring Work Group

Key Tasks:

- Identify and evaluate options for how the West-wide function should be structured, for example:
 - Individual RTO market monitors coordinate on West-wide market issues;
 - Umbrella market monitor focuses on seams issues; and
 - Single, primary market monitor for Western markets.
- Consider the appropriate division of responsibilities between the West-wide market monitoring function and individual Western RTO market monitoring units.
- Consider appropriate data release and confidentiality standards.

Common Systems Interface Coordination (CSIC)

Purpose:

To share information and coordinate technical systems development for the Western RTOs in order to achieve:

- seamless interfaces between RTOs,
- lower costs, and
- systems and processes that have effective operability and that address the complexities of each region with their unique system characteristics and environment.

Common Systems Interface Coordination (CSIC)

Key Products to date:

- **Single market interface:** Recommended a methodology for developing a single market interface across the three Western RTOs.
- **Backup control center:** Identified options for providing backup control centers for the three Western RTOs.
- **Communications infrastructure:** Identified options for a single monitored high capacity communications system between the three Western RTOs.
- **Training:** Identified options for sharing training between the three Western RTOs.
- **Outlined a common/open system for wholesale electric transactions.**

Common Systems Interface Coordination (CSIC)

Key Tasks:

- **Implementation coordination** – Help Western RTOs keep current with and take into consideration each other's systems implementation processes.
- **Process simulation coordination** - Help the Western RTOs develop process simulation approaches that take into account systems of the three RTOs to avoid simulation gaps.
- **Business process modeling** - Identify opportunities to improve consistency among the Western RTOs with respect to transaction processes and terminology.
- **Look at other systems** as appropriate.

Price Reciprocity Work Group



Purpose:

To develop a proposal(s) that reduces barriers to interregional trading while preserving each RTO's balanced pricing proposals and their underlying objectives.

Price Reciprocity Work Group

Products developed to date by Work Group:

- Identified four viable price reciprocity options for further consideration:
 - No Change to Proposed RTO Pricing Structures;
 - Reciprocal Waiver of Wheeling Charges;
 - Transfer Payment Mechanism (Between RTOs); and
 - West-wide Wheeling Charge.
- Identified initial proposal regarding the criteria necessary to evaluate any price reciprocity proposals for further development and consideration.

Price Reciprocity

Work Group

Key Tasks:

- Identify applicable existing charges and proposed charges applied to various transactions.
- Collect data and analyze the financial implications on the current/proposed processes for collecting revenues related to interregional transactions.
- Finalize development of options for price reciprocity.
- Develop proposals for addressing pricing seams with and services offered to non-participants.
- Develop assessment criteria, consider available pricing options, and identify suggested alternative.

Schedule for 2003

Congestion Management

Priority Codes: High ■ Normal ■

| Work Group | Task No. | Task Description | 1st Quarter | | | 2nd Quarter | | | 3rd Quarter | | | 4th Quarter | | |
|------------|----------|---|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| CMAWG | 6 | Analyze Mixed Phys/Fin CM Model -- Identify limited number of models to test | ■ | ■ | ■ | | | | | | | | | |
| CMAWG | 7 | Determine need and possibilities for common congestion clearing prices at boundaries | ■ | ■ | ■ | | | | | | | | | |
| CMAWG | 8 | Evaluate granularity requirements of physical system models used for internal & external calculations | ■ | ■ | ■ | | | | | | | | | |
| CMAWG | 9 | Progress report on 1st Quarter technical tasks | | | | ■ | ■ | | | | | | | |
| CMAWG | 11 | Analyze Mixed Phys/Fin CM Model -- Test identified models for manageability | | | | ■ | ■ | ■ | | | | | | |
| CMAWG | 21 | Progress report on 2nd Quarter technical tasks | | | | | | | ■ | ■ | | | | |
| CMAWG | 22 | Develop consensus proposal for core elements of seamless Western market | | | | | | | | ■ | ■ | ■ | | |

Schedule for 2003

Transmission Planning

Priority Codes: High ■ Normal ■

| Work Group | Task No. | Task Description | 1st Quarter | | | 2nd Quarter | | | 3rd Quarter | | | 4th Quarter | | |
|------------|----------|--|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| PWG | 17 | Develop Process Trans. Projects needed for economic reasons to facilitate seamless market | | | | ■ | ■ | ■ | | | | | | |
| PWG | 18 | Develop process for evaluating projects affecting multi- RTOs, developed externally & want RTO recovery. | | | | ■ | ■ | ■ | | | | | | |
| PWG | 19 | Determine if and how SSG-WI (joint RTO action) will support implementation of recommended projects | | | | ■ | ■ | ■ | | | | | | |
| PWG | 20 | Develop process to resolve difference for interconnections w/o FERC litigation | | | | ■ | ■ | ■ | | | | | | |
| PWG | 23 | Develop SSG-WI Transmission Plan | | | | | | | ■ | ■ | ■ | | | |

Schedule for 2003

Market Monitoring

Priority Codes: High ■ Normal ■

| Work Group | Task No. | Task Description | 1st Quarter | | | 2nd Quarter | | | 3rd Quarter | | | 4th Quarter | | |
|------------|----------|---|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| MMWG | 1 | Develop & Detail Market Monitor Structure Options | ■ | ■ | ■ | | | | | | | | | |
| MMWG | 16 | Develop Initial Proposal on Confidentiality of Data | | | | ■ | ■ | ■ | | | | | | |

Schedule for 2003

Common Systems Interface

Priority Codes: High ■ Normal ■

| Work Group | Task No. | Task Description | 1st Quarter | | | 2nd Quarter | | | 3rd Quarter | | | 4th Quarter | | |
|------------|----------|--|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| CSIC | 2 | Propose Implementation Plans for Seams-related systems | ■ | ■ | ■ | | | | | | | | | |
| CSIC | 3 | Examine other systems as necessary | ■ | ■ | ■ | | | | | | | | | |
| CSIC | 10 | Implementation Coordination | | | | ■ | ■ | ■ | | | | | | |
| CSIC | 12 | Simulation Coordination | | | | ■ | ■ | ■ | | | | | | |
| CSIC | 13 | Business Process Modeling | | | | ■ | ■ | ■ | | | | | | |

Schedule for 2003

Price Reciprocity

Priority Codes: High ■ Normal ■

| Work Group | Task No. | Task Description | 1st Quarter | | | 2nd Quarter | | | 3rd Quarter | | | 4th Quarter | | |
|------------|----------|--|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------|-----|-----|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| PRWG | 4 | Identify existing and proposed charges applied to inter-RTO transactions | ■ | ■ | ■ | | | | | | | | | |
| PRWG | 5 | Develop assessment criteria. | ■ | ■ | ■ | | | | | | | | | |
| PRWG | 14 | Collect Data and Analyze financial implications of current and proposed transactions fee collections | | | | ■ | ■ | ■ | | | | | | |
| PRWG | 15 | Finalize Assessment Criteria | | | | ■ | ■ | ■ | | | | | | |
| PRWG | 24 | Finalized development of price reciprocity options | | | | | | | ■ | ■ | ■ | | | |
| PRWG | 25 | Consider Available pricing options | | | | | | | ■ | ■ | ■ | | | |
| PRWG | 26 | Develop Proposals for addressing pricing seams for services to non-participants | | | | | | | | | | ■ | ■ | ■ |
| PRWG | 27 | Identify suggested alternatives | | | | | | | | | | ■ | ■ | ■ |

“Making It Work”

Practical Considerations:

- Long history of finding West-wide solutions --Loop Flow & Phase Shifters, RTG Formation, etc.
- Inherent feedback between SSG-WI and RTOs, i.e., the same people working both processes.
- Sizable non-jurisdictional transmission assets in the West.

What We Need from FERC:

- Flexibility in approach.
- Assistance in issue resolution.

SSG-WI Website

SSG-WI Website:

- www.ssg-wi.com
- Website provides information on upcoming SSG-WI meetings as well as documents regarding SSG-WI activities.