

## **Regional Participation:**

### **WestConnect Project Agreement for Subregional Transmission Planning (STP Agreement):**

An Agreement signed by the WestConnect Parties that implements the WestConnect Planning Objectives and Procedures for Regional Transmission Planning. This Agreement details the management, cost and cost allocation for the sub-regional planning process.

[http://www.westconnect.com/filestorage/wc\\_regional\\_planning\\_project\\_agmt\\_exec\\_copy\\_052307\\_amended\\_obj\\_proc\\_011409.pdf](http://www.westconnect.com/filestorage/wc_regional_planning_project_agmt_exec_copy_052307_amended_obj_proc_011409.pdf)

### **WestConnect Objectives and Procedures for Regional Transmission Planning:**

Provide for the resources and funding for the development of a ten (10) year integrated regional transmission plan for the WestConnect Footprint on a biennial basis and resources and funding for other studies, e.g. load saturation or fault studies, for the WestConnect Footprint or sub-areas therein as it is deemed appropriate. Promotes an open, transparent and alternatives-based transmission planning process to facilitate comment, input and exchange of information by all interested Stakeholders during all phases of development of the WestConnect biennial regional transmission planning process and the integration of the WestConnect biennial regional transmission planning process with other sub-regional transmission planning efforts within the Western Interconnection and the Western Electricity Coordinating Council (“WECC”).

<http://www.westconnect.com/filestorage/WC%20Planning%20Objectives-Procedures%20Revision%201%20approved%20by%20PMC%201-14-09.pdf>

### **WestConnect Transmission Plan Guide:**

A guide to establish a framework for future WestConnect Transmission Plans following the principals found in the WestConnect Project Agreement for Subregional Transmission Planning. Describes the prerequisites for inclusion of projects into the Plan, define the segments of the Plan and prescribe the content and format of the WestConnect Transmission Plan.

<http://www.westconnect.com/filestorage/WestConnect%20Transmission%20Plan%20Guide%207-22-2008.pdf>

### **WestConnect Transmission Planning Report Guideline:**

A document that describes in general terms what will be included in the annual WestConnect Transmission Report (“Report”), including the prerequisites for inclusion in the Report, how the Report will be organized, the basic format of the Report and how the Report will be submitted annually to the WestConnect Planning Management Committee for approval and then posted on the WestConnect website.

<http://www.westconnect.com/filestorage/WestConnect%20Transmission%20Planning%20Report%20Guideline%207-22-2008.pdf>

### **2011 WestConnect Annual Transmission Planning Report:**

This report documents the subregional transmission planning processes that occurred within the WestConnect planning area in calendar years 2010-2011 for the planning years 2011 through 2020. It describes each of the active subregional transmission planning groups and their respective 2010-2011 study efforts. This report also describes the WestConnect subregional planning participants' responses to emerging public policy and regulatory requirements. Finally, this report outlines the proposed 2010-2011 WestConnect subregional transmission planning study plan. These collective efforts have resulted in an integrated ten year transmission plan for the WestConnect subregional planning participants.

[http://www.westconnect.com/filestorage/westconnect\\_2011\\_planning\\_final\\_report\\_041511](http://www.westconnect.com/filestorage/westconnect_2011_planning_final_report_041511)

### **2011 WestConnect Transmission Plan:**

The 2011 WestConnect Transmission Plan ("Plan") is a subregional transmission plan coordinated and assembled on behalf of WestConnect subregional planning participants and stakeholders. The authority and purpose of this WestConnect Transmission Plan is derived from the May 2, 2007 WestConnect Project Agreement for Subregional Transmission Planning ("STP Agreement"). This Plan includes the ten-year transmission plans (2011 through 2020) of the parties that have signed the WestConnect STP Agreement. The 2011 Plan also includes transmission plans of other parties that have proposed, studied, presented and sought stakeholder comments on their respective transmission projects during the 2011 subregional planning processes active within the WestConnect Planning Area.

[http://www.westconnect.com/filestorage/westconnect\\_2011\\_plan\\_final\\_report\\_041511](http://www.westconnect.com/filestorage/westconnect_2011_plan_final_report_041511)

### **Economic Planning:**

#### **WECC 10-Year Regional Transmission Plan:**

The Western Electricity Coordinating Council (WECC) 10-Year Regional Transmission Plan (Plan) is a Western Interconnection-wide perspective. The Plan provides information on an expected future transmission and generation in the Western Interconnection, what transmission capacity may be needed under a variety of futures, and other insights. The objective of the Plan is to provide information to support decision-makers in determining where and when to build new transmission, or to take other related actions to help ensure the Western Interconnection is reliable, low-cost, efficient, and environmentally sound. The WECC 10-Year Regional Transmission Plan and its associated documents were approved by the WECC Board of Directors on September 22, 2011.

<http://www.wecc.biz/library/StudyReport/Wiki%20Pages/Home.aspx>

*Note: Links to documents are found on the left of this URL's page*

### **2012 TEPPC Study Program - Study Request Form:**

The 2012 Study Program will build upon the 2011 Study Program, and new study requests submitted to TEPPC will be prioritized within the context of those cases not completed as part of the 2011 Study Program (defined as medium and low priority). Please note, the 2022 Common Case developed as part of the 2011 Study Program will be used throughout 2012, and no new common case will be developed until the 2013 Study Program.

<http://www.wecc.biz/committees/BOD/TEPPC/Lists/2012TEPPCStudyProgram/NewForm.aspx>

### **TEPPC 2011 Annual Study Program:**

Approved 2011 study program.

<http://www.wecc.biz/committees/BOD/TEPPC/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fcommittees%2fBOD%2fTEPPC%2fShared%20Documents%2fAnnual%20Study%20Programs%2f2011&FolderCTID=%26View=%27b3FECCB9E%2d172C%2d41C1%2d9880%2dA1CF02C537B7%7d>

### **TEPPC 2011 Study Requests:**

List of requests (2011) for economic planning studies to be considered in the annual synchronized study plan.

<http://www.wecc.biz/committees/BOD/TEPPC/EconomicPlanningStudies/Reports/Forms/AllItems.aspx?RootFolder=%2fcommittees%2fBOD%2fTEPPC%2fEconomicPlanningStudies%2fReports%2f2011&FolderCTID=0x012000139FF33A40D7F6498376BF43B929BF02>

### **Charter of the Transmission Expansion Planning Policy Committee:**

WECC and its members have determined that WECC has a role in meeting the region's need for regional economic transmission planning and analyses by providing impartial and reliable data, public process leadership, and analytical tools and services. The activities of WECC in this area will be guided and overseen by a new board-level committee, the Transmission Expansion Planning Policy Committee (TEPPC). This document establishes TEPPC's three main functions of: (1) overseeing database management, (2) providing policy and management of the planning process, and (3) guiding the analyses and modeling for Western Interconnection economic transmission expansion planning.

<http://www.wecc.biz/committees/BOD/TEPPC/Shared%20Documents/Charter%20and%20Protocol/TEPPC%20charter.pdf>

## **Transmission Planning Protocol of Western Electricity Coordinating Council's Transmission Expansion Planning Policy Committee:**

A Protocol that governs the transmission planning process used by the Western Electricity Coordinating Council's (WECC) Transmission Expansion Planning Policy Committee (TEPPC) to support transmission providers in meeting the transmission planning obligations of Attachment K to the transmission providers' Open Access Transmission Tariffs (OATTs). TEPPC's support includes preparing and making a transmission economic planning database available, conducting transmission economic expansion studies as part of a Western Interconnection synchronized study cycle and facilitating collaborative efforts among subregional planning groups within the Western Interconnection.

<http://www.wecc.biz/committees/BOD/TEPPC/Shared%20Documents/Charter%20and%20Protocol/TEPPC%20Planning%20Protocol.pdf>

### **Other:**

### **Long Term Planning Tools**

WECC conducts long-term transmission planning with a "horizon year" of 20 or more years past the first year being studied. The purpose of such a long-term view is not to try to accurately predict the shape of the network at a particular point in time, but rather to consider possible end-states of the transmission system in the horizon-year. WECC uses that information as a guide to current decision making that will have long-range effects on future network design. WECC seeks guidance throughout the long-term planning process from a broad set of stakeholders including representatives from states and provinces, utilities, agencies, non-governmental organizations, energy developers, and consumer advocates.

**Study Case Development Tool (SCDT):** The Study Case Development Tool will transform potential "energy future" scenarios into cases (data models) that can be analytically studied. These cases will include nodal details for each corresponding future scenario capturing load and generation profiles in addition to other decision factors encompassed within scenarios such as RPS, resource mix, load growth, etc. The SCDT will also be used to identify potential transmission paths and configurations subject to decision factors such as geospatial environmental constraints, geographic constraints, etc. The SCDT will provide the input data needed by the Network Expansion Tool (NXT) and will receive transmission capital costs from the NXT. The SCDT will be used iteratively with the NXT to find an optimal balance of new generation profiles and transmission expansion necessary to achieve a given scenario study case while minimizing capital costs.

**Network Expansion Tool (NXT):** The Network Expansion Tool will optimally derive physically feasible network expansions necessary to meet the load and generation requirements of each scenario study case while minimizing the net present value of capital costs. The NXT will also derive the sequencing and timing of the transmission expansions derived. The NXT receives its input data from the SCDT and feeds

transmission capital costs back to the SCDT. The NXT will be used iteratively with the SCDT to find an optimal balance of new generation profiles and transmission expansion necessary to achieve a given scenario study case while minimizing capital costs.

<http://www.wecc.biz/Planning/TransmissionExpansion/RTEP/LTPT/default.aspx>

**Project Information Portal:**

The Project Information Portal is a public database of major transmission projects in the Western Interconnection known to WECC. It provides a single location where interested parties can find basic information about major transmission projects in the Western Interconnection. Information in the Portal is provided by the respective project developer.

<http://www.wecc.biz/Planning/TransmissionExpansion/Map/Pages/default.aspx>