

# Regional Transmission Resources

The following is a summary of attempts to address long-term regional transmission planning and expansion issues discussed in Chapter 5, Electric Resources.

## *I. Regionally-based Efforts*

### **A. Northwest Transmission Assessment Committee (NTAC)**

The Northwest Transmission Assessment Committee (NTAC) was established in 2003 to approach transmission issues from a perspective influenced by both commercial and reliability needs. NTAC continues to function as an open forum to address forward-looking planning and development for the Northwest Power Pool (NWPP) area transmission system.

NTAC subcommittees continue to study congested paths of interest to participants. They have studied and continue to study the Puget Sound area, the Montana to Northwest path, the Pacific Northwest/Canada to Northern California path, and the SE Washington/NE Oregon area. They also perform various reliability studies.

NTAC is also reviewing the Northern Lights proposal, from Fort McMurray, Alberta to Celilo. Follow-up work on the Pacific Northwest/Canada to Northern California study performed by NTAC has been picked up by Pacific Gas and Electric Company (PG&E).

### **B. Pacific Northwest/Canada to Northern California**

This transmission project is intended to be operational by 2013. It is the natural outgrowth of the NTAC study completed in May 2006 exploring the possibility of transmitting renewable resources from Canada and Northwestern US to California. PG&E is taking the next step; they intend to formulate and go through all the stages of the WECC process. This proposed transmission project is intended to provide three main benefits:

- Access to significant incremental renewable resources in Canada and the Pacific Northwest.
- Regional transmission reliability improvement.
- Opportunities for market participants to use the facilities

### ***C. The Rocky Mountain Area Transmission Study (RMATS)***

RMATS has identified projects for both short- and long-term improvements. One of the RMATS recommendations was for export projects beyond that footprint, which included the Montana to the Northwest path. The RMATS work has been picked up by others, including the planning for the Frontier Line and Wyoming Infrastructure Authority.

### ***D. Northwest Wind Integration Action Plan***

The Northwest Power and Conservation Council and BPA have co-sponsored development of a Northwest Wind Integration Action Plan. The plan will identify and commit participants to regional steps to cost-effectively integrate large amounts of wind power and other intermittent renewable resources into the Northwest power system. The Council's 5th Power Plan calls for 6,000 megawatts of new wind generation over the next 20 years. The Transmission Expansion and Planning Committee has developed transmission plans to integrate the addition of 6,000 megawatts of wind.

### ***E. Involvement of Western State Governors***

The Western Governors' Association (WGA) continues to respond to issues regarding transmission. The WGA formed the Clean and Diversified Energy Advisory Committee (CDEAC) and charged it with the task of identifying incentive-based, non-mandatory recommendations that would facilitate 30,000 megawatts of new clean and diverse energy by 2015, a 20 percent increase in energy efficiency by 2020 and adequate transmission for the region. From the CDEAC report the Western Governors adopted numerous recommendations regarding transmission, including

- encouraging federal agencies to collaborate with Western states and regional organizations on facility siting and infrastructure planning,
- encouraging proactive, transparent, stakeholder-driven regional transmission expansion planning, defer to existing regional and sub-regional processes that meet such standards, and reform imbalance penalties to allow for greater use of the existing transmission system.

- supporting reforms in the U.S. Federal Energy Regulatory Commission's Open Access Transmission Tariff to implement the recommendations of the CDEAC that promote (a) regional transmission planning expansion and (b) expanded use of the existing transmission grid by reforming imbalance penalties.

## *II. The Energy Policy Act of 2005 (EPAct)*

The EPAct addressed the difficulties of siting major new transmission facilities by authorizing the Secretary of Energy to designate “national interest electric transmission corridors” where there is major transmission congestion. EPAct allows applicants seeking to build transmission within these corridors to seek construction permits from the FERC under certain conditions. While most transmission projects will continue to be sited by states under state law, EPAct granted the FERC this important supplemental siting authority. FERC has proposed rules on transmission siting that will govern the issuance of construction permits by the FERC for projects that meet the statutory criteria.

In order to know what geographic areas FERC has authority to issue construction permits, FERC first had to determine where there was congestion. The U. S. Department of Energy was charged with the task of performing a study of congestion around the nation.

Department of Energy (DOE) National Electric Transmission Congestion Study  
This is the first congestion study, published in August 2006, performed by the DOE (or Department), in response to EPAct. The study suggested that the Department now has to focus greater attention on the need to maintain, upgrade and build major transmission lines. The study primarily examines transmission congestion in many areas of the Nation of both the Eastern and Western Interconnections. From PSE IRP perspectives, it is relevant to focus on the Western region.

The Department categorizes three classes of congestion areas which warrant further Federal attention:

- Critical Congestion Areas - Where solutions to remedy existing or growing congestion problems are seriously needed. Southern California has been identified as such an area.

- Congestion Areas of Concern - Where a major congestion problem exists or may be emerging, but additional information and analyses are needed to confirm. Seattle–Portland and San Francisco Bay areas are identified as Areas of Concern.
- Conditional Congestion Areas - Where some congestion might exist, but significant congestion could result if major new generation resources were to be developed without the addition of more transmission capacity. These areas are potential locations for large-scale development of wind, coal and nuclear generation capacity to serve distant load centers. The Montana-Wyoming (coal and wind) has been identified as one such area of interest.

The Department believes that it may be appropriate to designate one or more National Corridors to facilitate relief of transmission congestion for the Critical Congestion Areas. However, it will also consider designating National Corridors to relieve congestion in Congestion Areas of Concern and Conditional Congestion Areas.

The study also explains that the states of Washington and Oregon are no longer peaking in winter only. Rapid population growth has led to summer air conditioning loads, and economic trends have shifted away from manufacturing toward a more service-based economy. With these developments, the Pacific Northwest faces a growing need for more transmission capacity to support market transactions and protect system reliability.