

## **Proposal to CREPC to Better Link LSE Integrated Resource Plans with Regional Transmission and Resource Adequacy Analyses**

### **PROPOSAL**

It is proposed that PUCs in the Western states and provinces consider and adopt the following at the CREPC meeting

**PUCs in Western states and provinces agree that future Integrated Resource Plans (IRPs<sup>1</sup>) of load serving entities (LSEs) under their jurisdiction should include the following three information items in future:**

- 1. A comparison of the LSE's analysis of generation and transmission choices with the applicable sub-regional and interconnection-wide transmission plans.**
- 2. A reconciliation of the LSE's load forecast in the IRP and load forecast submitted to the Western Electricity Coordinating Council.** As part of this reconciliation of load forecasts, LSEs should provide information on treatment of and underlying assumptions used for energy efficiency (e.g. base case forecast without energy efficiency, naturally occurring energy efficiency, impact of codes and standards, and utility energy efficiency programs) and demand response.
- 3. A reconciliation of "committed" resource additions through IRPs or other state processes (e.g., RFPs for power, mandatory renewable generation purchases outside of IRP processes) with resource additions submitted to WECC.**

**Those states and provinces that do not require LSE IRPs (Alberta, Arizona, New Mexico) and public power entities are encouraged to do these studies.**

### **PURPOSE**

Integrating IRP data with regional planning and resource adequacy efforts will improve the flow of information about the western electric transmission system, and thereby: (1) improve the quality of regional transmission planning and resource adequacy assessments; and (2) enable PUCs to better understand how LSE resource plans fit into regional transmission plans and resource adequacy assessments. Specifically, PUCs will:

- Have information on how regional transmission investments might provide lower cost resources to consumers; and
- Have greater confidence in the degree to which regional resource adequacy assessments reflect what is in public IRPs and thus can make more informed

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<sup>1</sup> The term IRP is used in a broad sense and includes LSE least cost plans (e.g., Colorado) and submissions to PUCs pursuant to an authorization for utilities to acquire resources (e.g., California).

decisions on the degree to which their LSEs should rely on the market to cover potential shortfalls in resources rather than building or buying long-term resources.

## **BACKGROUND**

We are in the midst of a wave of new IRPs by the following LSEs in the Western Interconnection:

- PacifiCorp
- Portland General Electric
- Puget Sound Energy
- Avista
- BC Hydro
- Idaho Power
- Xcel
- San Diego Gas & Electric
- Southern California Edison
- Pacific Gas & Electric
- Nevada Power
- Sierra Pacific
- NorthWestern Utilities
- Any other LSE long-term load forecasts and resource plans.

Transmission Planning: In the past year, there have been intensive transmission planning efforts at the interconnection-wide and sub-regional level:

- The SSG-WI (Seams Steering Committee-Western Interconnection) released an interconnection-wide plan in October 2004; a new “realistic” generation scenario is to be modeled in the winter 2004-2005.
- RMATS (Rocky Mountain Area Transmission Study) released its Phase I recommendations in September 2004.
- STEP (Southwest Transmission Expansion Process) has evaluated alternatives to increase transfer capacity from Palo Verde to Southern California. Investments have been approved to implement some of the recommendations and action on other proposed transmission investments is pending.
- NTAC (Northwest Transmission Assessment Committee) has begun evaluating transmission needs for reliability purposes and to enable imports of power from Canada, Montana and Wyoming.
- SWAT (Southwest Area Transmission) is expected to release its plans by the end of the year.

Effective planning requires good and reliable data. In the case of SSG-WI, RMATS and STEP, transmission expansion needs were evaluated using a publicly-

available database. Load forecasts in the database were derived from information submitted to WECC. In the case of SSG-WI and RMATS, the type and location of future generation was assumed. In the case of RMATS, load and generation information for PacifiCorp, Idaho Power, and Xcel were derived from recent IRPs. Using load and generation information from LSE resource plans can improve the quality of transmission plans and make it more likely that regulators will consider favorably recovery of the costs of transmission expansion that fits with the resource plans of their regulated LSE.

The RMATS process also uncovered a weakness in LSE IRP efforts. LSE IRPs are typically developed without considering the generation and transmission capabilities of neighboring LSEs. This “stovepipe” approach to planning ignores the interrelationships between LSEs and neglects potential opportunities to improve efficiency.<sup>2</sup> The current IRP method focuses too narrowly on the single LSE service territory. As a result, opportunities for more economic but “lumpy” generation and transmission projects are not considered because these projects create excess generation or transmission capacity for any single LSE. Generally, LSE IRPs have been weak in analyzing transmission needs.

Resource Adequacy: In the past year, there has also been an effort by CREPC’s West-wide Resource Assessment Team and WECC to define and adopt appropriate resource adequacy standards. As CREPC agreed in April, this effort requires more granularity than is presently available in publicly-available aggregated load forecasts for the six WECC regions (Canada, Northwest, Rockies, Desert Southwest, Northern California, Southern California/Mexico). Based on CREPC’s instructions in April, a letter was sent to WECC urging that WECC receive and make public load forecasts by control area.

The recommended reconciliation between the load and resource data contained in LSE resource plans and the data provided to WECC for the Council’s existing Power Supply Assessment and potential future resource adequacy standards will:

- Result in greater transparency in WECC analyses and provide PUCs with detailed information on the portion of aggregated WECC load and resource data represented by jurisdictional LSEs;
- Give PUCs greater confidence in the validity of conclusions in the WECC analyses; and
- As a result, allow PUCs to make more informed decisions on the degree to which their LSEs should rely on the market for resources to cover potential shortfalls rather than building or buying long-term resources.

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<sup>2</sup> The power plans of the Northwest Power and Conservation Council provide a regional framework for LSE plans in that sub-region. No comparable framework exists in other sub-regions.

## **CONCLUSION**

The commitments by PUCs proposed in this memo will improve the quality of regional transmission planning, regional resource adequacy assessments, and LSE resource plans. If the proposal is agreed to by CREPC in Vancouver, at its Spring 2005 meeting CREPC would review the experience to date in integrating LSE IRPs information into regional transmission planning and WECC resource adequacy assessments.