Coincident Peak Load Forecasting Methodology

Prepared for June 3, 2010 Meeting with Division of Public Utilities



Pacific Power | Rocky Mountain Power

Development of Coincident Peak Forecast



Monthly Energy Forecast by Customer Class and by State



Industrial Sales Forecast

- Approximately 25% of industrial sales is forecasted through the model
- Remainder of industrial customers are separated into two categories:
 - Existing customers tracked by the Customer Account Managers (CAMs)
 - » CAMs provide 3 year forecast for existing customers
 - » Customer is tracked if more than 1 MW
 - New large customer or expansions by existing large customers



Jurisdictional Peak Forecast

- ✓ Peak Forecast is developed using an econometric model
 - > Monthly and seasonal peak forecast for each state are developed from historic peak producing weather and several related variables



Utah Peak Model Results



Coincident Peak by State

- The model uses historical state specific hourly load data to develop an hourly load pattern
- The hourly load pattern is adjusted for line losses and calibrated to jurisdictional peaks and energy
- Hourly loads are aggregated to the total company system level
- Coincident system peak is identified by month as well as the contribution of each jurisdiction to those monthly system peaks
- Model ensures consistency between
 - Peak forecast and jurisdictional peak load
 - Hourly load and monthly sales with line loss

