

Policy Reference Guide Orderly Transition to More Secure and Sustainable Electricity

These measures help reduce costs, improve reliability and diversify our electric system. They build on policies now in place in western states.

Energy Efficiency

- Policy: Ensure energy efficiency resources are evaluated and procured the same way as generation resources. De-couple utility kWh sales from profits.
- Goal: Reduce system costs by meeting 80% of western load growth with energy efficiency savings through 2020.
- Now: Northwest Power & Conservation Council 6th Plan shows region can meet 80% of load growth with energy efficiency through 2020.

Emissions and Water Performance Standards

- Policy: Add these to Integrated Resource Plans. Create level basis for evaluating generation and non-generation resources, and fossil and non-fossil ones.
- Goals: Reduce overall cost and risk of electric service; reduce emissions and water use.
- Now: State emissions performance standards are changing portfolio mix.

Increase Renewable Energy Targets

- Policy: Sustained, orderly development of geothermal, solar and wind resources and transmission to access and deliver them.
- Goals: Diversify utility portfolios to reduce risk, spur job creation and economic development in every state.
- Now: States have increased renewable energy standards since first enacting them.

Expand Distributed Generation

- Policy: Simplify connection of small-scale PV to distribution circuits. Finance small systems through mortgages or property taxes outside of electric rates. Consider feed-in tariffs with 10-year declining prices. Deploy Combined Heat and Power to supply electricity, heating and cooling in city centers, not just industrial facilities.
- Goals: Increase local generation to improve system reliability, reduce large-scale outage risk; minimize new transmission to cities.
- Now: California goal is 12,000 MW of clean Distributed Generation by 2020.

Expand Use of Customer Resources

- Policy: Compensate use of customer resources, including Electric Vehicle charging/discharging and voluntary curtailment, at the same rate as generation. Aggregate them so they can be dispatched by grid operators.
- Goals: Reduce peak loads, improve reliability at lower cost and with fewer emissions than generation-transmission alternatives.
- Now: Pennsylvania-Jersey-Maryland (PJM) region uses 14,000 MW of demand resources, avoiding emissions and need for new generation-transmission.

Protect Land and Habitat, Reduce Costs with Renewable Energy Zones

- Policy: Use state siting and permitting requirements to focus wind and solar development into limited geographic areas having high quality resources, giving priority to use of already-disturbed lands.
- Goals: Minimize land and habitat impacts of wind-solar development. Minimize transmission needed to access large-scale renewables, to reduce costs and impacts. Streamline and speed permitting for renewable energy projects.
- Now: Six states have identified REZ and are guiding development to them. BLM has defined Solar Energy Zones; will add wind and geothermal zones.

Adopt Grid Reforms To Improve Reliability, Reduce Cost

Policy: Functional consolidation of Balancing Areas, so operators can draw on larger pools of resources to keep the system balanced.

Fifteen-minute scheduling and dispatch, to allow markets to supply more flexibility for operating the grid.

Better forecasting, to reduce weather-related system operating costs.

Energy Imbalance Market, to allow operators to meet balancing needs at lower cost, make more efficient use of existing transmission.

- Goals: Reduce costs for all customers, including costs of integrating wind and solar generation; improve reliability.
- Now: Western Governor's Resolution encourages Balancing Area consolidation. Energy Imbalance Market encourages faster scheduling, resource sharing.

Re-Purpose Gas-Fired Generation to Supply Flexibility

- Policy: Use gas generation to provide system flexibility and capacity, not energy. Rely on low marginal cost renewables to supply more energy. Ensure gas generators can operate profitably in system balancing duty. Adopt best practices for fracking.
- Goals: Utilize over-supply of gas-fired generation more efficiently. Use wind, solar and geothermal energy to minimize costs and impacts of obtaining and burning gas to supply energy. Ensure responsible gas production.
- Now: Colorado PUC approved repowering 463 MW of coal to gas.

Plan for Coal Transition

- Policy: Evaluate coal plant retrofit applications in Integrated Resource Plans, to identify least-cost alternatives. Require owners of coal plants more than 30 years old to develop multi-year transition plans that compensate plant retirement and identify ways to meet local reliability needs at least cost and impact. Evaluate use of freed-up transmission by renewables.
- Goals: Reduced emissions and water use. Orderly transition to more diverse, decentralized and secure resources. Early solution of any reliability issues associated with coal retirement. Minimize new transmission needed to access and deliver geothermal, solar and wind power.
- Now: Agreements in 2011 retire 2,800 MW in Colorado, Oregon and Washington and provide orderly transition away from coal. Meeting 2015 air quality requirements will require retrofit or retirement of many more.

Develop Regional Markets for Renewable Energy

- Policy: Encourage state export and import of renewables, and transmission development to support it. Coal retirement creates new buyers in every state. Energy Imbalance Market a first step toward regional markets.
- Goals: Reduce costs by creating larger, more liquid market for renewables; more buyers and more competition among suppliers.
- Now: State PUCs, utilities evaluating an Energy Imbalance Market.

Coordinate Transmission Planning Across the West

- Policy: FERC Order 1000 requires regional coordination; adopt best practices for compliance. Coordinate sub-regional planning into WECC-wide planning. Determine infrastructure for regional markets for renewables; anticipate long-term regional needs. Involve stakeholders to produce plans responsive to public concerns. Ensure access to development zones.
- Goals: Regional plans that improve reliability, reduce congestion, provide access to renewables for the entire West; have broad public support; minimize transmission by accessing development zones; enable development of regional markets.
- Now: WECC Regional Transmission Plan process sets standards for openness and transparency in planning; ensures involvement of states and non-utility stakeholders; minimizes environmental impacts; will prepare scenario-based, 20-year plan to accommodate regional needs.