

Responsible planning

Electric Integrated Resource Plan



Colorado Springs Utilities
It's how we're all connected

Designed to ensure customers have reliable electricity at a reasonable cost, the Electric Integrated Resource Plan, or EIRP, is a long-term strategic plan that combines technical analysis and public participation.

The Energy Policy Act of 1992 requires utilities that receive federal allocations of hydropower to submit an EIRP every five years. We receive federal hydropower from Western Area Power Administration, a division of the U.S. Department of Energy.

We take careful consideration of the needs of our customers, the environmental impacts and rate implications of our energy resource portfolio.

A traditional EIRP process is driven by customer need and requests, and includes:

- Load forecast
- Resource analysis
- Public input
- Market prices
- Demand-side management potential
- Legislative and regulatory review system

We consider continued use of the following to have adequate electric supply for current and future customers.

- Conventional sources: coal and natural gas
- Renewable sources: solar, wind and hydropower
- Demand-side management: programs that influence the quantity or patterns of use of energy consumed by customers
- Short-term (seasonal) power purchases

Opinions differ, but the most commonly noted benefits are:

- Conventional sources: include lower cost and stable delivery
- Renewable sources: lower environmental emissions and price stability
- Demand-side management: more efficient use of our natural resources and lower bills



Our Manitou Hydroelectric Plant has been in operation for more than 100 years. Since water is the fuel that turns the generator, the energy produced is a clean component in our overall portfolio.

Recent forecasts indicate an increase of the projected customer electric demands over the next 10 to 15 years.

EIRP criteria

When reviewing and evaluating resource options, we adhere to the following criteria:

- Identify and compare all practicable energy efficiency and energy supply resource options.
- Include an action plan with timing set by forecasted customer demands, i.e. anticipated need date.
- Describe efforts to minimize adverse environmental effects of new resource acquisitions.
- Provide ample opportunity for full public participation.
- Conduct load forecasting.
- Include a brief description of measurement strategies for options identified in the EIRP to determine whether objectives are being met.

2004 EIRP preferred options

At the time of the amended EIRP planning process in 2004, engineers and public participants preferred a diverse, integrated assessment

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and resource plan that called for demand-side management and renewable energy options, in addition to traditional resources such as gas and coal. The final plan was a combination of technical analysis and public participation, which recommended:

Medium renewables
<ul style="list-style-type: none">• 3 megawatt hydro• 12 megawatt medium hydro• 10 megawatt wind• Conduct additional analysis of biomass options (2005-2006)
Moderate demand-side management
National average commitment. Implementation schedule has been revised. <ul style="list-style-type: none">• 0.25 percent of energy per year (new)• 0.4 percent of demand per year (new)
Traditional supply side resources
<ul style="list-style-type: none">• Coal – 2016• Coal – 2021
Continue to investigate additional transmission interconnection opportunities as needed to support supply options
Action plan implementation

2007 amendment

A number of events have taken place that impacts the implementation of the 2004 EIRP since it was presented to Utilities Board in November 2004.

The key drivers for updating the EIRP are:

- Diverging customer expectations: keep costs low, though there is greater willingness to pay more for DSM/renewable programs than three years ago. Be environmentally sensitive – do more than required – be a leader. More customer choice and control over energy bill.
- Wind costs were higher than anticipated; we need to quantify wind integration costs.
- The load forecast has changed.
- Initiation of Amendment 37 and our decision to self-certify.
- Introduction of State House Bill 1281 –Renewable Portfolio Standards – which doubles the state’s renewable portfolio

standard to 20 percent by 2020 for investor-owned utilities. Municipal utilities must meet 10 percent by 2020.

- Increasing reliance on gas-fired generation; and gas market volatility.
- There is a longer ramp-up period for DSM implementation.
- A need to update costs based on renewable energy engineering and economic studies.
- The potential for significant cost increases due to changes in environmental legislation pertaining to CO2 taxation. The uncertainty related to potential carbon legislation calls for an expanded approach to extend the need date for base-load generating capacity through the use of purchase power agreements and by partnering with our customers to leverage demand-side opportunities.

Next steps

The changing landscape is reshaping our approach to resource planning. We will update our EIRP to reflect changes in forecast, resources, legislation and public opinion.

Staff will conduct additional research and resource analysis to pursue a more robust, diverse portfolio with customer choice options.

More information

Visit www.csu.org for planning updates and more energy information. You may also contact Gail Conners, issues manager, at 668-8012.

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