

Background

Platte River Power Authority is a not-for-profit wholesale electricity generation and transmission provider. Its three core pillars of operation are to safely deliver reliable, environmentally responsible and financially sustainable energy and services to its owner communities of Estes Park, Fort Collins, Longmont and Loveland, Colorado, for delivery to their utility customers.

Current status

Approximately 30% of the energy Platte River delivers to its owner communities comes from noncarbon resources including hydro, solar and wind power. Approximately 65% comes from coal-fired generation and 5% from market purchases and natural gas.

Platte River will soon add 225 MW of new wind capacity and 22 MW of new solar (with battery storage). After completion of these projects in late 2020, approximately 50% of the energy delivered to the owner communities will come from noncarbon resources. Additionally, Platte River is considering the addition of another 100-150 MW of solar by 2023, which will raise the share of noncarbon energy delivered to the owner communities to 60%. By the end of 2025, the Craig coal-fired Unit 1 will be retired and discussions concerning the life of Craig Unit 2 are currently taking place.

Integrated resource plan

In late 2018, Platte River Power Authority's Board of Directors approved the Resource Diversification Policy to pursue a 100% noncarbon energy mix by 2030, one of the most aggressive of its kind in the nation. Platte River is taking steps toward this goal while maintaining its three core pillars. Achieving this goal depends on a variety of factors, summarized as follows:

- Joining an organized regional market
- Energy storage (battery) technology improvement with cost decline
- Transmission/distribution grid system investments and integration
- Distributed generation performance improvement
- Advanced grid management systems
- Rate structures to facilitate objectives

Beyond 2023, Platte River must decide how it will move forward. Each of the following energy mix options have been developed as part of its 2020 Integrated Resource Plan (IRP).

Unlike broad, theoretical studies that use one-size-fits-all assumptions, Platte River's IRP uses sophisticated modeling of Platte River's unique resources, available technologies and specific constraints, all studied by industry experts using the best industry practices to develop Platte River's resource mix options for the future. The resource mix options offered incorporate forecasted capital, operational, fuel and environmental costs, including a carbon tax.