

Power On Demand — Fast and Efficient



Over **100 MW** on grid in less than 10 minutes from start signal

30% less fuel burn during start up

50% less CO₂ emissions

Challenge

Platte River Power Authority is a not-for-profit wholesale electricity generation and transmission provider in Colorado.

Platte River's 668 MW Rawhide Energy Station consists of a primary coal fired unit with four GE 7EA gas turbines as peaking and backup units. Additional power sources include coal, hydro and wind.

Platte River required a backup of its primary unit as well as a backup for any other operating sources. Additionally, they wanted a hedge against short term market pricing fluctuations, while maintaining strict emissions controls.

Solution

To achieve Platt River's goals, GE installed OpFlex Fast Start software solution on two of the four GE 7EA, 65 MW gas units.

This software-only modification allows for rapid starting and loading of the gas turbines, with a guarantee of 90% base load within 10 minutes, while reducing fuel burn and start up emissions.

Results

Platt River is now able to quickly start and load two 7EA gas turbines for approximately 117 MW in 10 minutes. These GTs can now realistically act as a backup for Rawhide's primary unit and for system emergencies.

