



CPUC Resource Adequacy Workshop

February 22, 2018

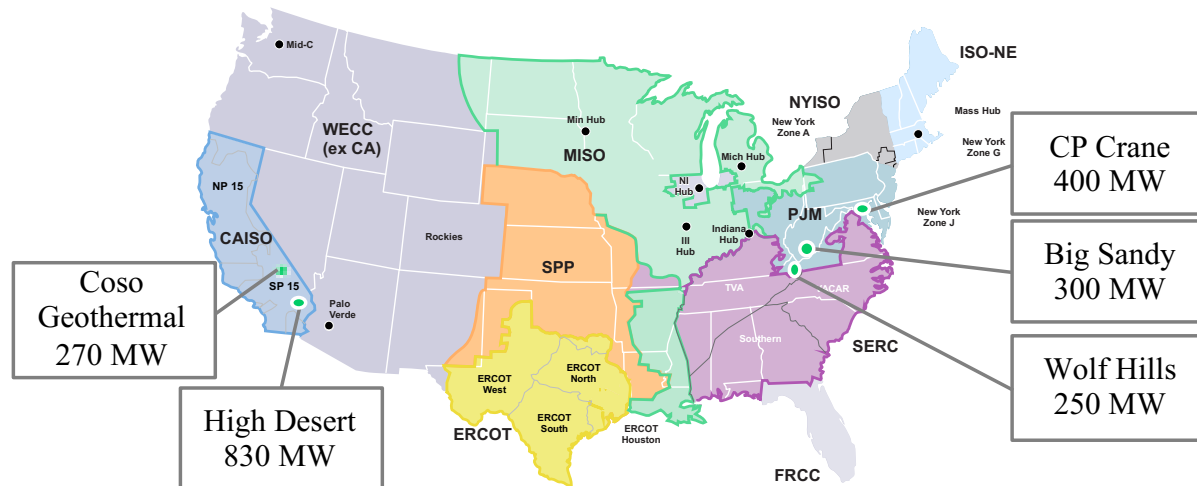


Introduction to Middle River Power

Description

- Founded in 2016, Middle River Power (“MRP”) currently manages over 2,000 MWs of generation in the United States
- California Portfolio consists of:
 - 830 MW High Desert Combined Cycle Gas Turbine Facility – Victorville
 - 270 MW Coso Geothermal Facility – China Lake
 - 100 MW High Desert PV Solar Development
- Additional facilities totaling 950 MWs of generation in PJM including CP Crane, Big Sandy, and Wolf Hills

Portfolio Overview



California's Resource Adequacy Program Needs Reform

Issues Requiring Attention

- Monthly forecasting methodology needs to be replaced with an annual procurement target that reflects the realities of a power grid with significant and growing variable energy resources
 - Reserve margins have been tested on numerous occasions in 2017

- RA contracting process is broken and causing unnecessary challenges
 - Generators' revenue paradigm has shifted
 - Efficient run profiles have lowered energy revenues, requiring more RA revenue certainty
 - Evolution of customer choice has increased the number of LSEs

- Supply needs to be provided with fair, long-term price signals
 - Transparency is critical to market success
 - Time for transition to 100% renewable supply is critical – once units retire they are gone for good
 - SB 350 requirements should be included in the design to balance costs, GHG reductions and reliability

Rationale for Change

- RA system requirements have fallen short in critical periods of 2017
- ELCC needs to be applied in a consistent and coordinated manner - behind-the-meter solar should be counted the same as after-the-meter
- Antiquated process is creating an unfair barrier to entry for CCAs
- Resource supply and need continue to shift drastically
- Generators need to operate and plan annually - monthly procurement just concentrates revenue requirements

MRP believes the following items should be addressed in Track 1. Fixing forecasting and planning reserve margins are fundamental to achieving a successful program in 2019.

1

Multi-year Procurement

- ◆ Design a 3 to 5-year procurement mechanism for flexible, system and local resources
- ◆ Program should be consistent with SB 350 requirements

2

Centralized Procurement

- ◆ Create one or more centralized buyers to procure all multi-year forward RA
- ◆ CAISO is best positioned to manage a centralized procurement mechanism for flexible, system and local capacity

3

Forecasting and Reserve Margins

- ◆ Behind-the-meter solar treatment should be appropriately addressed
- ◆ Simplify forecasting requirements to meet annual or season requirements
- ◆ Update and enhance all forecast assumption for 2019 procurement

Resource Adequacy Program Foundational Enhancements

Forecasting and Planning Reserve Margin

- Forecasting deficiencies should be addressed in Track 1 to set a foundation for 2019 RA procurement
- Elements to be addressed:
 - **1-in-2 forecasting** – examine whether 1-in-2 procurement forecast remains appropriate
 - CAISO suggested in their recent comments changes are necessary
 - Recent weather and load volatility confirms need
 - **Revise Planning Targets** – set appropriate seasonal and/or monthly reserve margins
 - Reserve targets need to be set on resource performance, weather volatility and interchange capability
 - Appropriate reserve margins will reduce costly backstop procurement
 - **Effective Load Carrying Capacity (ELCC)** – reflect consistent and accurate approach between RA and IRP ELCC values
 - All solar should be evaluated the same for RA purposes
 - **Shift to Seasonal or Annual RA Requirements** – current monthly construct is problematic
 - Generators need annual revenue requirements to remain viable
 - Monthly granularity is needlessly complex and creates false precision
 - Other ISOs and RTOs have demonstrated success without the monthly framework

Questions?

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