



California ISO

# Demand response monitoring and baselines

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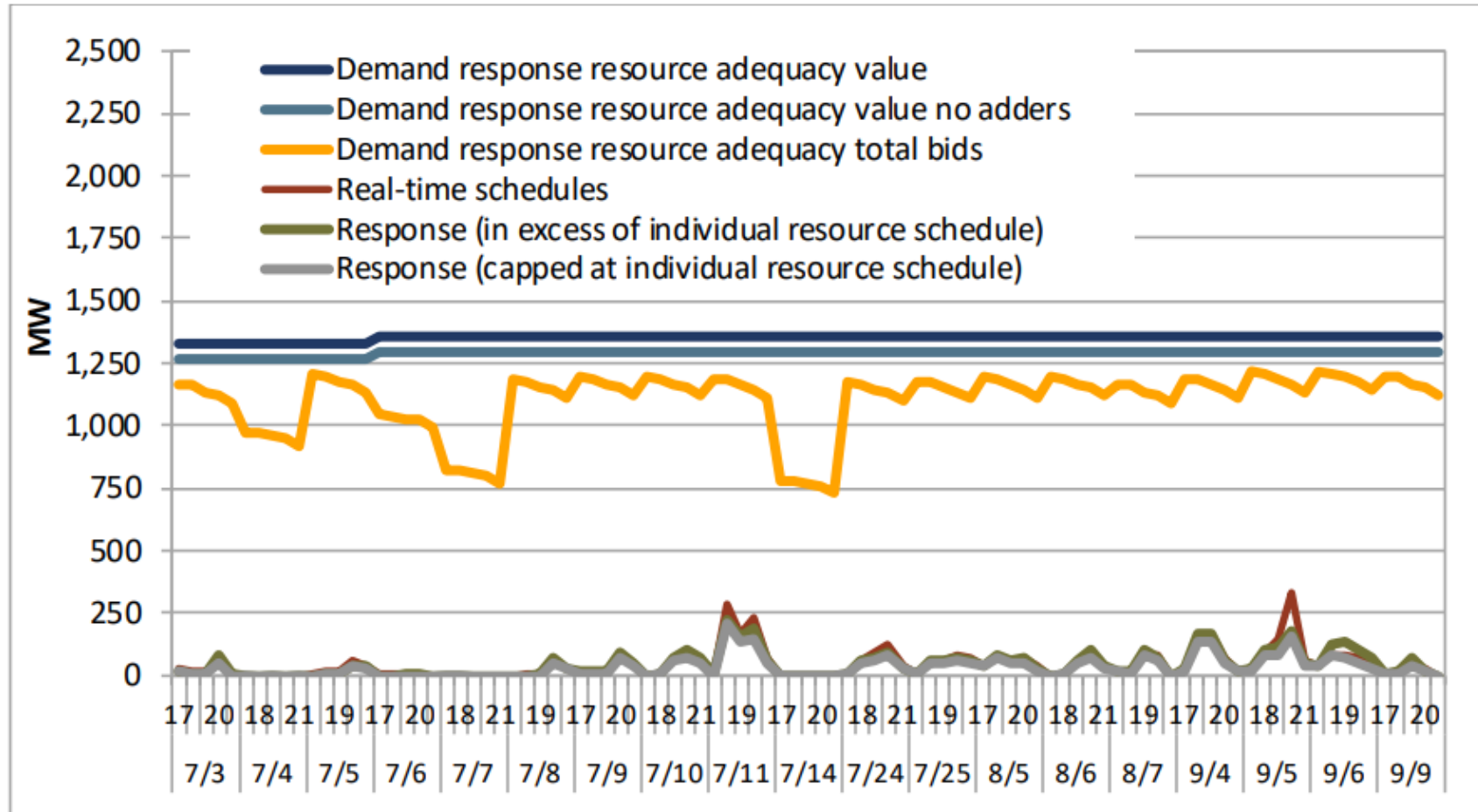
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# DMM monitoring

- DMM receives DR data from:
  - 2020 [Energy Storage and Distributed Energy Resources](#)
  - 2024 [Penalty enhancements - demand response, investigation, and tolling](#)
- DR data includes:
  - Baseline and load submitted by the scheduling coordinator
  - DMM recalculates baselines to compare submissions
  - Portfolio composition (location, etc.)
  - Bids and schedules

# Demand response scheduled versus RA

Demand response utilization in the energy market relatively low in 2024



[DMM 2024 DR Issues and Performance](#)

# Demand response revenues

Energy revenues are low, and DR revenues primarily from capacity

Year	Demand response type	Net energy market revenues (\$/kW-year)	Capacity price - system RA 85th percentile (\$/kW-year)	Capacity price - DRAM auction (\$/kW-year)
2022	Utility PDR	\$26.97	\$96.00	\$120.20
	Utility RDRR	\$3.42		
	3rd party PDR	\$15.18		
2023	Utility PDR	\$8.22	\$96.00	\$157.07
	Utility RDRR	\$0.75		
	3rd party PDR	\$7.30		
2024	Utility PDR	\$1.59	\$96.00	\$206.42
	Utility RDRR	\$0.41		
	3rd party PDR	\$2.67		

[DMM 2024 DR Issues and Performance](#)

# Baseline utilization

Baseline methodology	Count
Day Matching 10/10	147
Day Matching 5/10 (Residential Only)	10
Day Matching Combined	972
Meter Generation Output	11
PDR-LSR	1
<b>Grand Total</b>	<b>1,141</b>

## DR baselines

- There are 57 available baselines
- Suite of options include:
  - Day matching
  - Weather matching
  - Control groups
- Baseline under-utilization
  - DMM cautions against adding additional baseline methodologies unless necessary.

# Baseline discussion

- DMM would like to see improved performance and energy market utilization
  - In 2024, on high demand days in the summer, about 70 percent of total demand response capacity dispatched in real-time reported performing as scheduled.
- DMM advises against adding additional baselines
- DMM is recommends the ISO improve the existing baselines to encourage further DR participation in the energy market
- DMM questions if it is necessary to keep all the existing baselines

# Baseline discussion

- What are baseline improvements to increase performance, entry, and demand flexibility innovation?
- Does the California ISO need additional baselines?
  - Why are control groups and weather matching not used?