

Resource Adequacy Report

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The Energy to Thrive™

HB23-1039 Required Reporting

- HB23-1309 signed into law in 2023
- Requirements:
 - Annual resource adequacy report provided to regulatory oversight entity (CORE's Board)
 - Cover current and forward 5-year period
 - Describe resources & accredited capacity for resource adequacy
 - Provided to Colorado Energy Office & posted publically on website

Definitions

- Resource Adequacy
 - Ability to meet firm native load with available resources, throughout year
- Planning Reserve Margin
 - Capacity above forecast peak demand to cover contingencies (weather, outage, etc)
 - NERC requirement to limit probability of loss of load to 1 day in 10 years
- Effective Load Carrying Capability (ELCC)
 - Average probably capacity available at the time of peak load
- Accredited Capacity
 - Capacity value assigned to a resource accounting for nameplate capacity and ELCC of the resource
 - Accounts for weather dependency, seasonal impacts, transmission losses

CORE Supply Side Resources

Nameplate Summer Capacity (MW)		2024	2025	2026	2027	2028	2029
PSCo PPA	Contract	*	*				
WAPA LAP PPA	Federal Hydro	18	18	18	18	18	18
WAPA CRSP PPA	Federal Hydro	10	10	10	10	10	10
Comanche 3	Coal	190	190	190	190	190	190
Arapahoe CC	Natural Gas			118	118	118	118
Spindle Hill CTs	Natural Gas				296	296	296
Victory	Solar	13	13	13	13	13	13
Pioneer	Solar	80	80	80	80	80	80
Hunter	Solar	45	45	45	45	45	45
Southern Star	Solar			200	200	200	200
Distributed Gen	Solar	59	76	90	101	111	119
Towner III	Wind			199	199	199	199
Overland East	Wind				150	150	150
Southern Star	Battery			100	100	100	100
New Capacity				324	224	224	224
Nominal Resource Capacity		*	*	1,386	1,743	1,753	1,761

*CORE's resource adequacy requirements are met by Public Service Company of Colorado under a requirements power purchase agreement through the end of 2025

Assumptions

- Accredited capacity & load assessed at CORE substation delivery points
- Comanche 3 committed during likely peak (net renewable) high load days during summer
- Renewable technology ELCC assessed for each year based on total capacity & projected load shape
 - Marginal ELCC continues to drop with higher installed capacity



Accredited Resource Capacity

Firm/Accredited Capacity (MW) ³⁴⁹		2022	2024	2025	2026	2027	2028	2029
PSCo PPA	Contract	*		*				
WAPA LAP PPA	Federal Hydro	17		17	17	17	17	17
WAPA CRSP PPA	Federal Hydro	9		9	9	9	9	9
Comanche 3	Coal	187		187	187	187	187	187
Arapahoe CC	Natural Gas				110	110	110	110
Spindle Hill CTs	Natural Gas					277	277	277
Victory	Solar	4		3	3	3	3	3
Pioneer	Solar	24		22	20	19	18	17
Hunter	Solar				11	11	10	10
Southern Star	Solar				49	46	44	42
Distributed Gen	Solar	18		20	22	24	25	26
Towner III	Wind				27	22	22	22
Overland East	Wind					17	17	17
Southern Star	Battery				93	93	93	93
New Capacity					299	202	202	202
Nominal Resource Capacity		*		*	841	1,028	1,025	1,023

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Planning Reserve Margin

	2024	2025	2026	2027	2028	2029
CORE Retail Load	662	678	713	732	750	766
Demand Response	0	0	0	0	0	0
Net Load Obligation	662	678	713	732	750	766
Planning Reserve Margin (MW)	*	*	178	296	275	257
Planning Reserve Margin (%)	16.3%*	16.3%*	18.0%	40.4%	36.7%	33.6%

- 2026 target reserve margin: 17%
- Assessing impacts of PSCo modeled commitment decisions for Comanche 3
- Resource needs
 - Staff in active negotiations with counterparties to provide specific products and resources to meet projected shortfall (New Generation from prior slides)

*Approved PSCo reserve margin shown for 2024 and 2025.