

CORRECTIONS

Reposted 4/26/24

Slides Updated : 28, 40



Planning Resource Auction Results for Planning Year 2024-25

April 25, 2024

MISO is projected to meet most Planning Year 2024-25 resource adequacy requirements; however, pressure persists with reduced capacity surplus across the region and a shortfall in Zone 5

- The Planning Resource Auction (PRA) clearing prices are flat across the region, except for fall and spring in Zone 5 (Missouri)
 - Zone 5 cleared at seasonal Cost of New Entry (CONE) in fall and spring due to inadequate capacity to meet its Local Clearing Requirement, driven by resource retirements and seasonal outages

All Zones (except Zone 5)

- Summer: \$30/MW-day
- Fall: \$15/MW-day
- Winter: \$0.75/MW-day
- Spring: \$34.10/MW-day

Zone 5:

- Summer: \$30/MW-day
- Fall: \$719.81/MW-day
- Winter: \$0.75/MW-day
- Spring: \$719.81/MW-day

- Capacity surplus across MISO eroded 30% in summer, primarily in the North/Central region
 - Retirements, reduced imports and higher requirements are insufficiently offset by new capacity
 - Trends are similar across other seasons except for winter which has a higher surplus
- Receding surplus, coupled with emerging risks due to fleet transition and new load additions, continue to pressure resource adequacy
- MISO's efforts under the Reliability Imperative — Reliability-Based Demand Curve, accreditation and attributes — are timely and responsive to the evolving resource adequacy risk

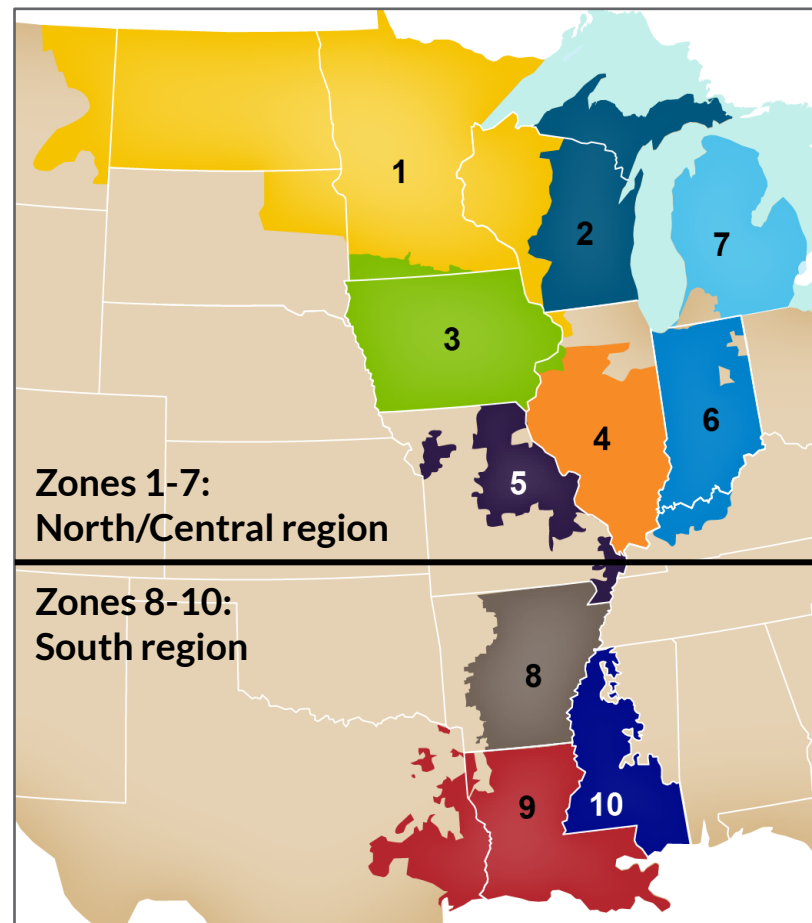
The 2024 PRA demonstrated sufficient capacity at the regional, sub-regional and zonal levels except for Zone 5

2024 PRA Results

Zone	Local Balancing Authorities	Summer	Fall (Price \$/MW-Day)	Winter	Spring
1	DPC, GRE, MDU, MP, NSP, OTP, SMP	30.00	15.00	0.75	34.10
2	ALTE, MGE, UPPC, WEC, WPS, MIUP	30.00	15.00	0.75	34.10
3	ALTW, MEC, MPW	30.00	15.00	0.75	34.10
4	AMIL, CWLP, SIPC, GLH	30.00	15.00	0.75	34.10
5	AMMO, CWLD	30.00	719.81	0.75	719.81
6	BREC, CIN, HE, IPL, NIPS, SIGE	30.00	15.00	0.75	34.10
7	CONS, DECO	30.00	15.00	0.75	34.10
8	EAI	30.00	15.00	0.75	34.10
9	CLEC, EES, LAFA, LAGN, LEPA	30.00	15.00	0.75	34.10
10	EMBA, SME	30.00	15.00	0.75	34.10
ERZ	KCPL, OPPD, WAUE (SPP), PJM, OVEC, LGEE, AECI, SPA, TVA	30.00	15.00	0.75	34.10

Highlighted values are CONE pricing

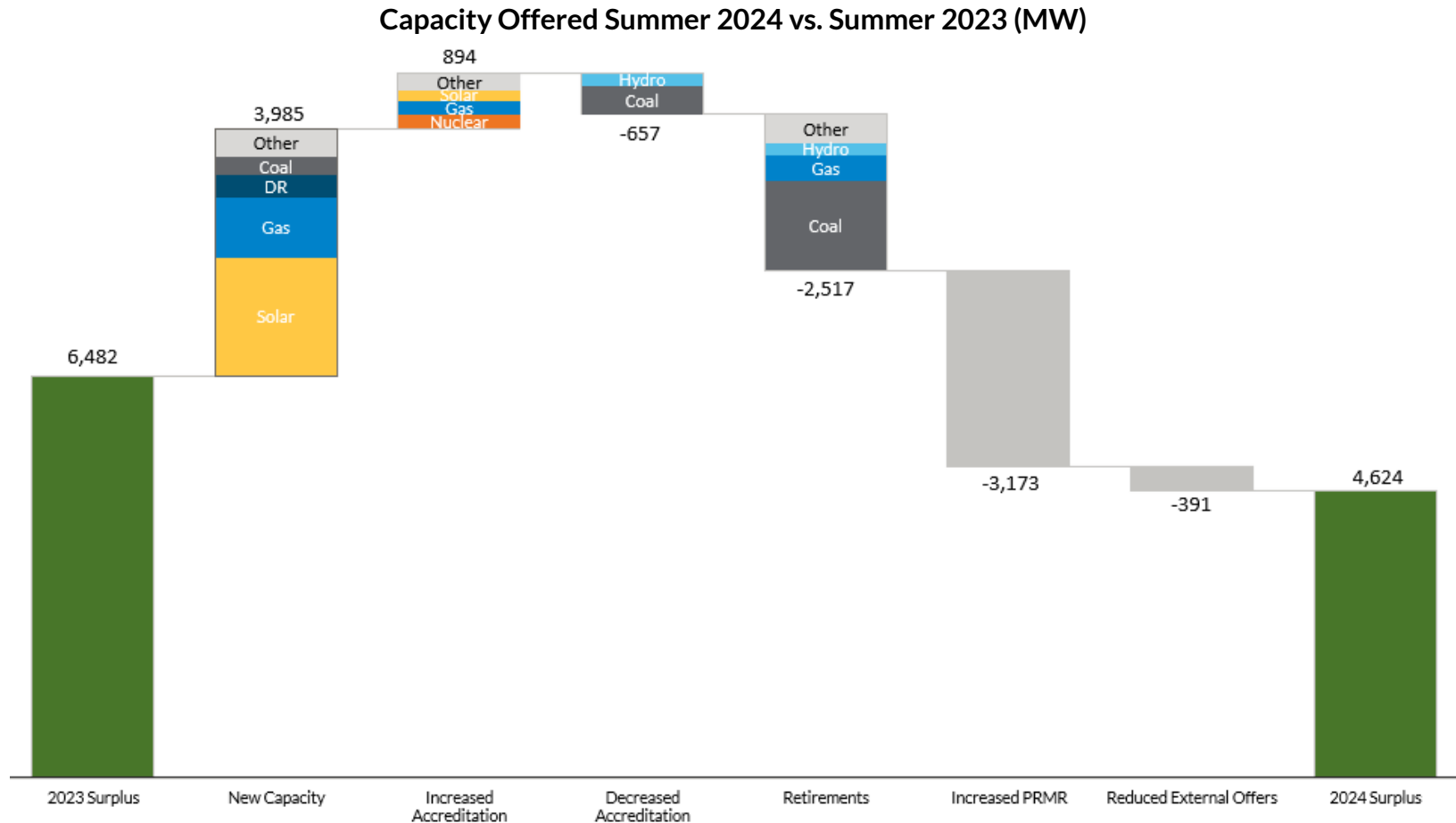
MISO Resource Adequacy Zones



ERZ: External Resource Zones

The MISO footprint showed approximately a 30% decrease in surplus but remained adequate

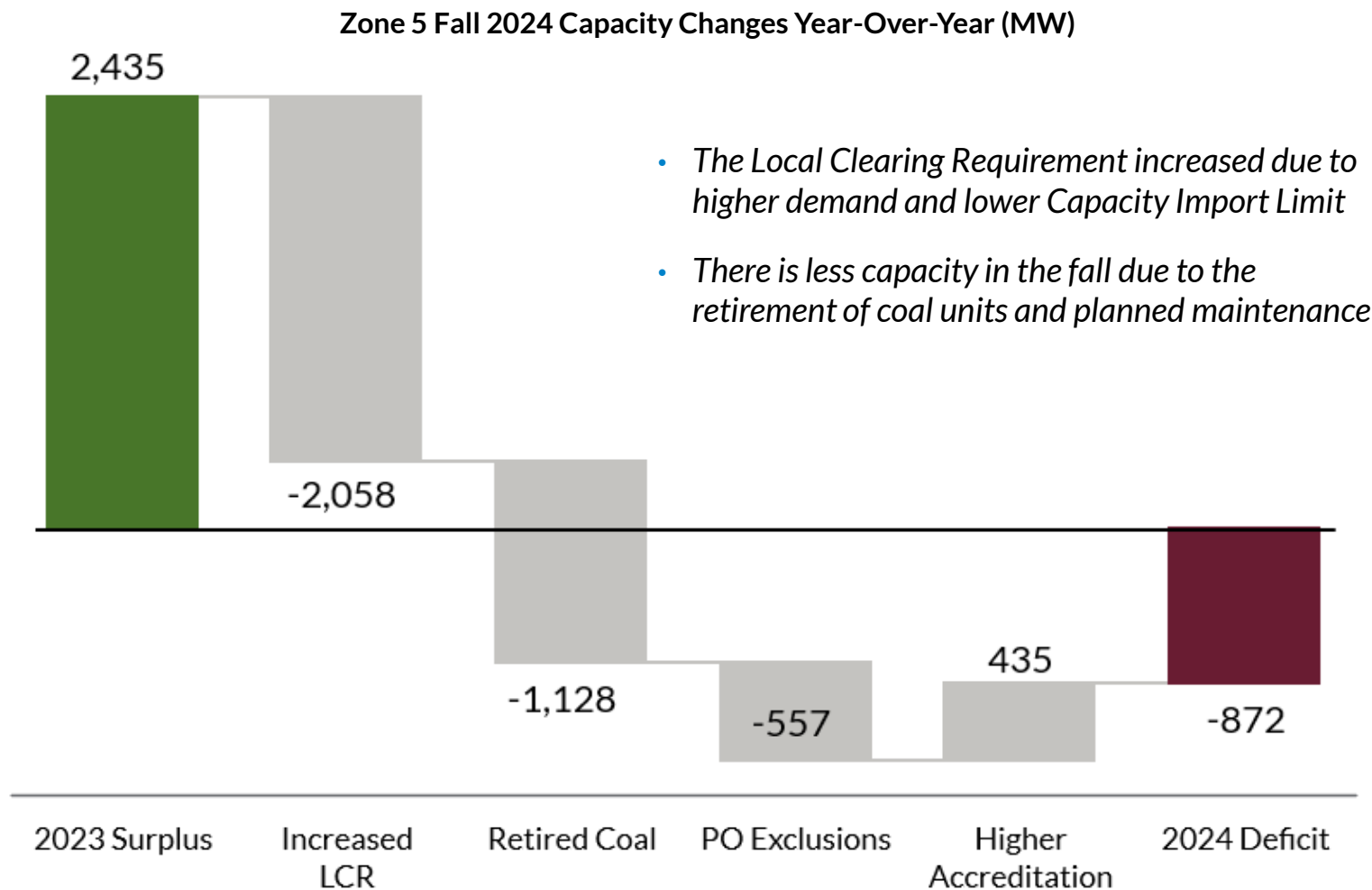
Reduced surplus driven by retirements, increased PRMR and reduced external offers



DR: Demand Response

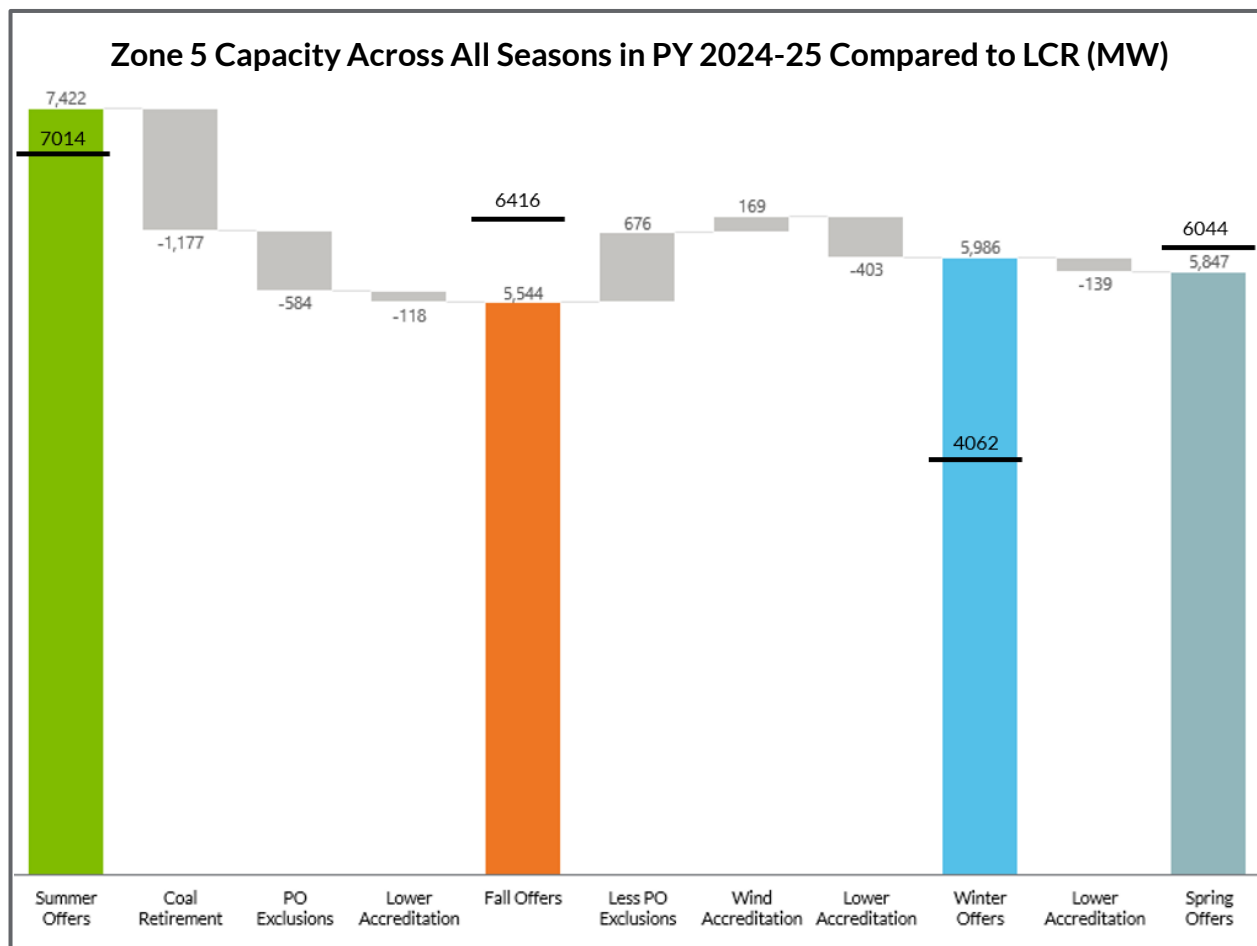
Capacity indicated is offered accredited value

A combination of higher Local Clearing Requirement and reduced capacity contributed to Zone 5 deficiency in the fall



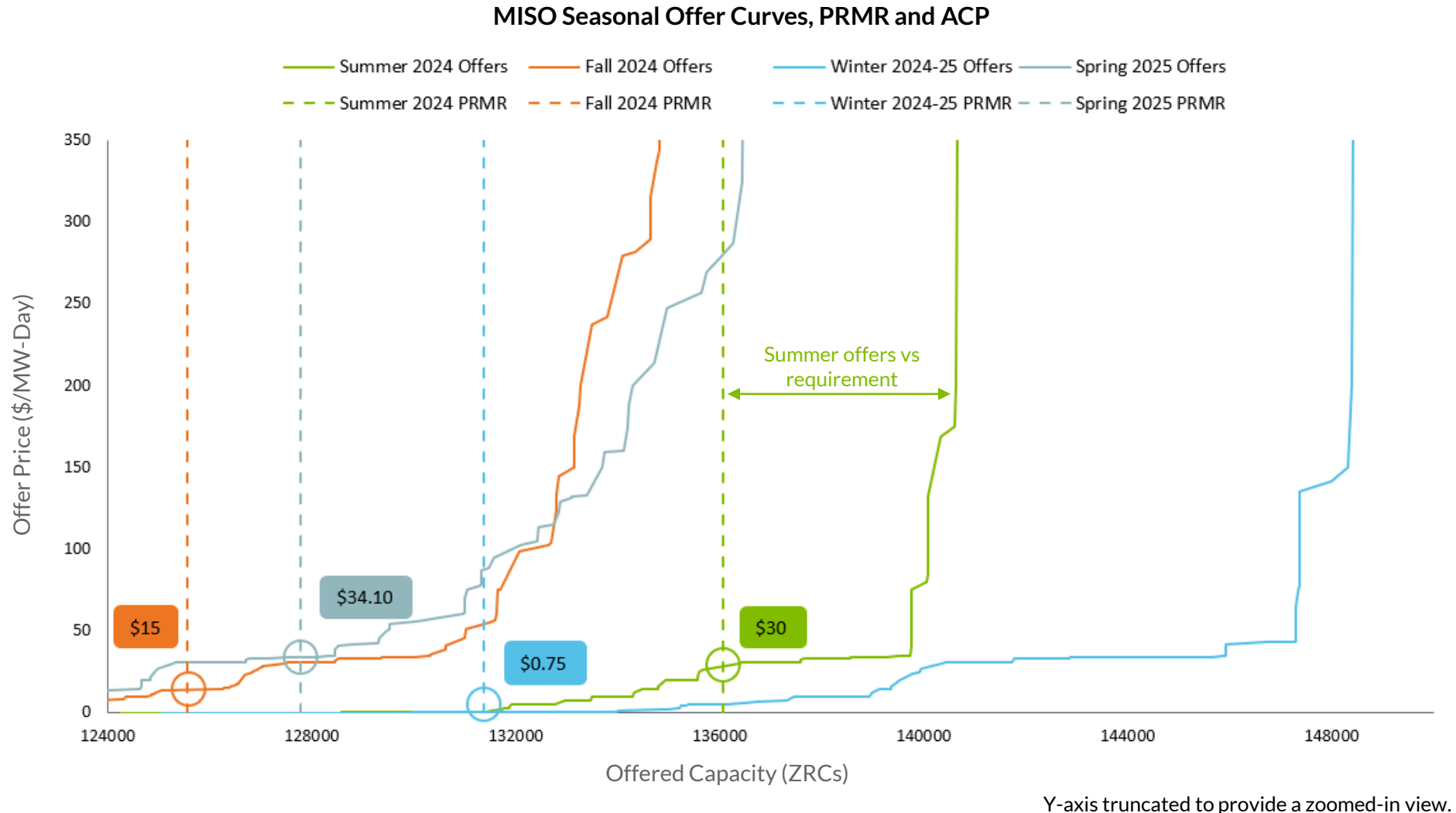
PO: Planned Outage

Seasonal variation in requirements and available capacity help explain the resource adequacy position in Zone 5



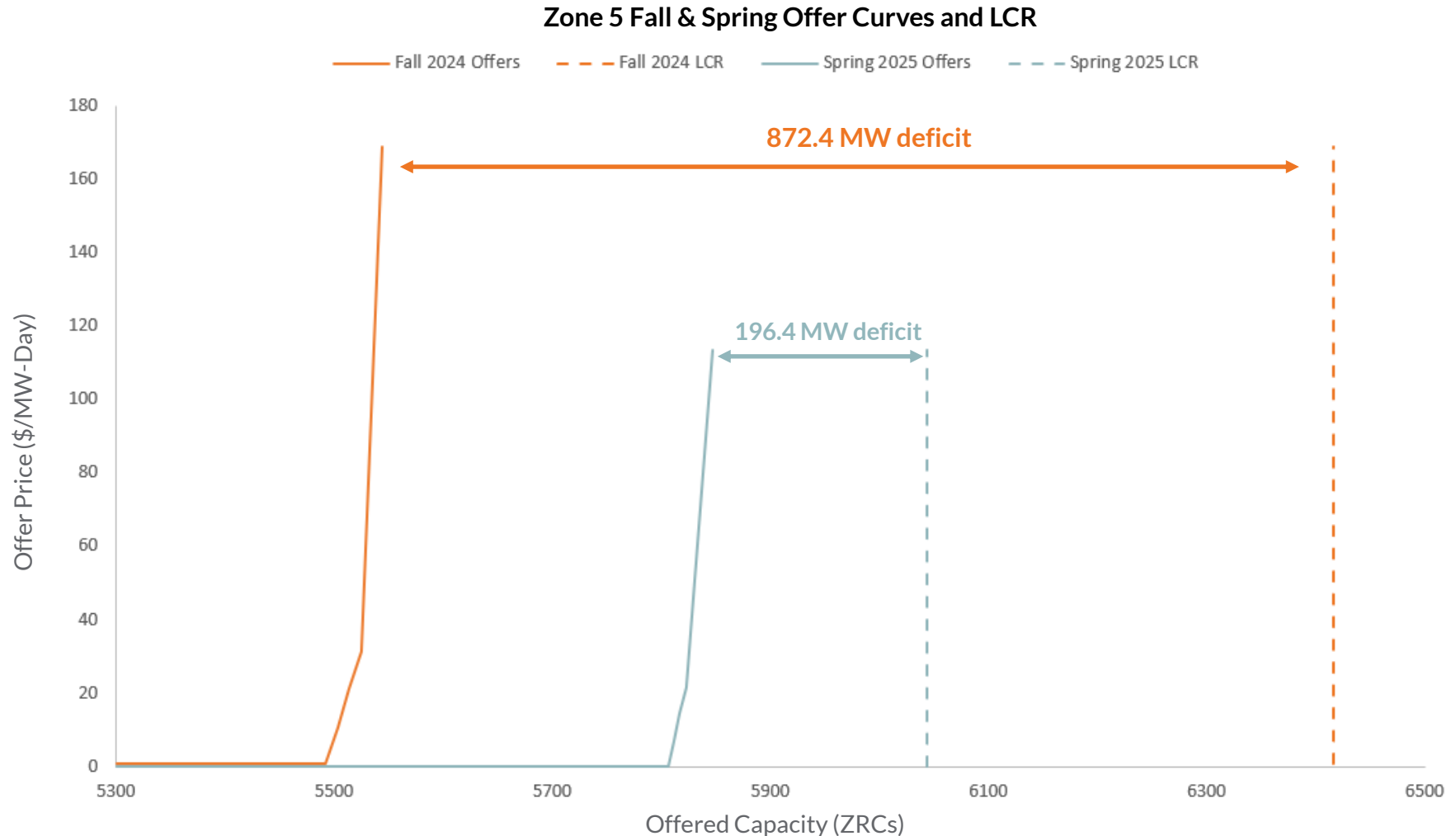
- Large coal retirements contribute to capacity deficiency; planned outages increase the gap in fall
- Lower Local Clearing Requirement in winter aids winter sufficiency
- Winter Local Clearing Requirement driven by relatively lower demand, Local Reliability Requirement and a higher import limit

Adequate supply resulted in level auction clearing prices in each season across MISO, except for Zone 5



PRMR: Planning Reserve Margin Requirement

Zone 5 did not have adequate capacity to meet Local Clearing Requirement in fall and spring, driving prices to seasonal CONE



Decreasing capacity surplus and the zonal deficiency, coupled with emerging risks due to fleet transition and new load additions, reinforce the urgency for ongoing reforms

Reforms under the Reliability Imperative are timely and responsive to the drivers contributing to resource adequacy challenges

DRIVERS

Premature retirement of dispatchable resources

Slow pace of resource additions

Loss of accredited capacity & reliability attributes

New load additions

MISO RESPONSE

Implemented

- Seasonal construct & thermal accreditation: implemented PY 2023-24

Filed

- Reliability-based demand curve: implementation PY 2025-26
- Resource accreditation: implementation PY 2028-29

Ongoing

- Load modifying resources accreditation: Target PY 2028-29
- Attributes roadmap and associated reforms

Next Steps

- **May 22**

- Zonal deliverability benefits available at the May RASC
- MISO publishes cleared Load Modifying Resources to Operations tools

- **May 24**

- Posting of PRA masked offer data per Module E 69 A.7.4

- **June 1**

- New Planning Year starts

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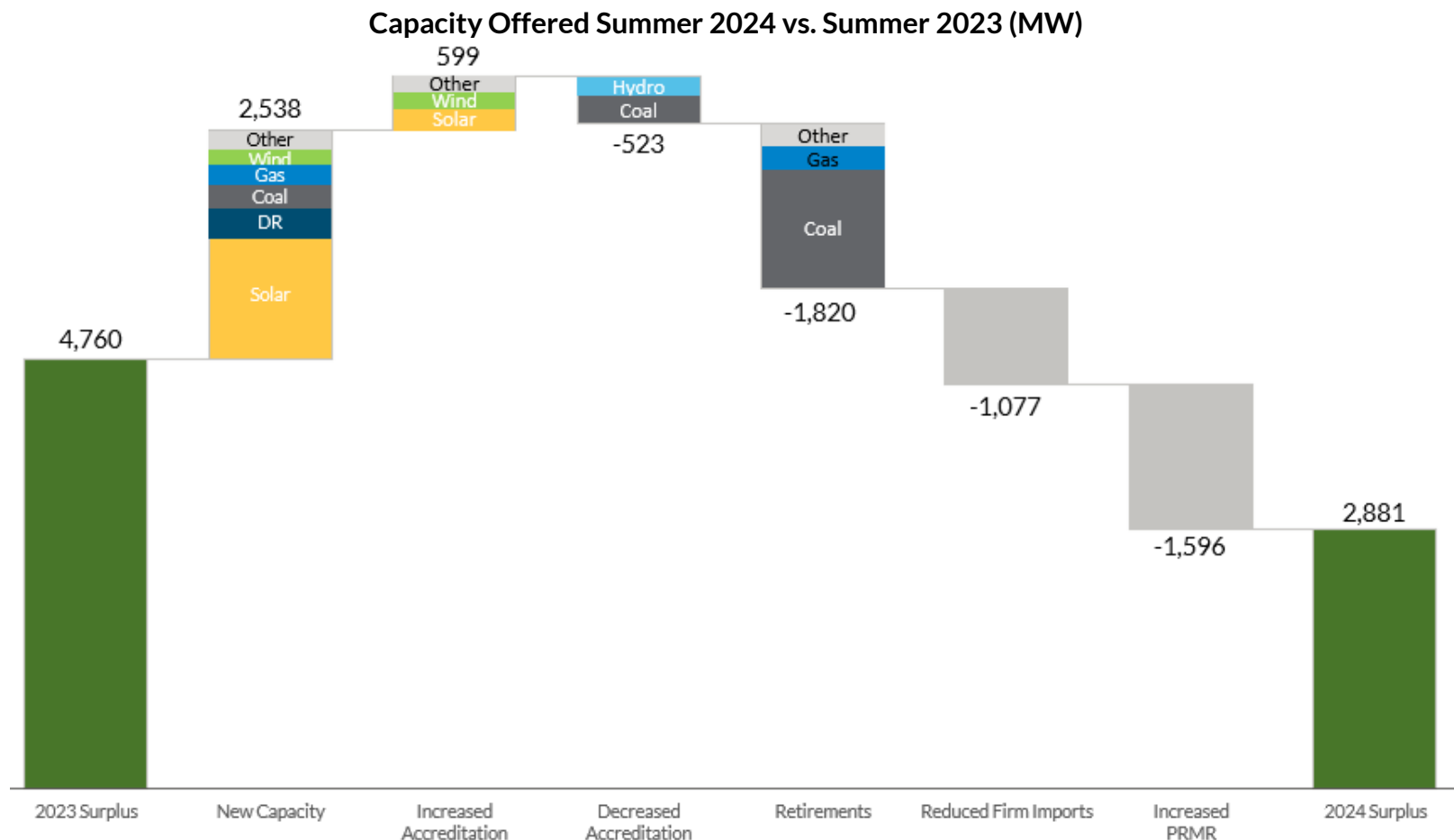
Acronyms

ACP: Auction Clearing Price
ARC: Aggregator of Retail Customers
BTMG: Behind the Meter Generator
CIL: Capacity Import Limit
CEL: Capacity Export Limit
CONE: Cost of New Entry
DR: Demand Resource
ELCC: Effective Load Carrying Capability
EE: Energy Efficiency
ER: External Resource
ERZ: External Resource Zones
FRAP: Fixed Resource Adequacy Plan
ICAP: Installed Capacity
IMM: Independent Market Monitor
LCR: Local Clearing Requirement

LMR: Load Modifying Resource
LRR: Local Reliability Requirement
LRZ: Local Resource Zone
LSE: Load Serving Entity
PO: Planned Outage
PRA: Planning Resource Auction
PRM: Planning Reserve Margin
PRMR: Planning Reserve Margin Requirement
RASC: Resource Adequacy Sub-Committee
SAC: Seasonal Accredited Capacity
SS: Self Schedule
UCAP: Unforced Capacity
ZIA: Zonal Import Ability
ZRC: Zonal Resource Credit

The North/Central region showed a 40% decrease in surplus but remained adequate

Reduced surplus driven by retirements, less imports and higher Planning Reserve Margin Requirement (PRMR)

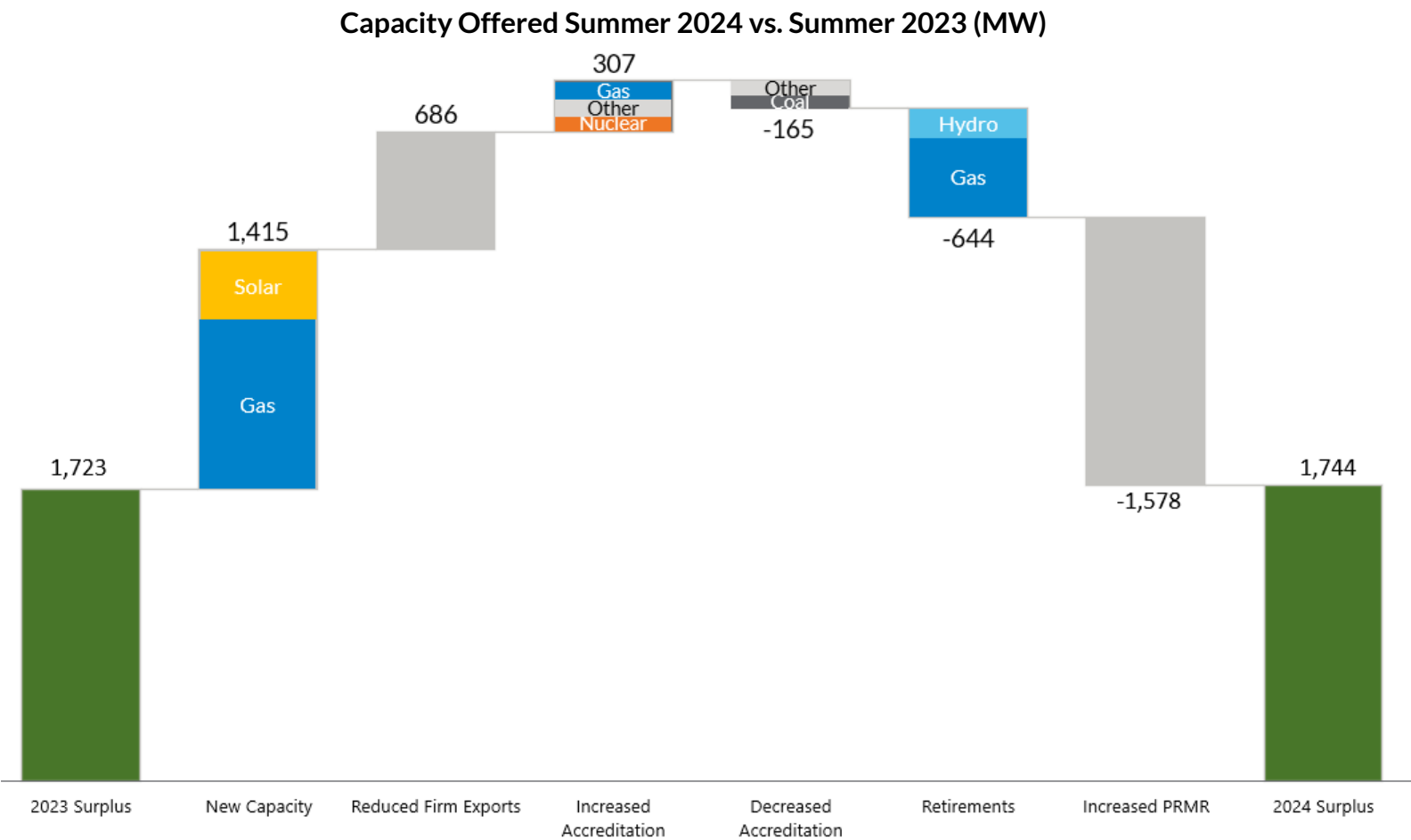


DR: Demand Response

Capacity indicated is offered accredited value

The South region continues to remain adequate with a comparable surplus to 2023

New generation and lower exports made up for the retirements and increased PRMR



Capacity indicated is offered accredited value

Summer 2024 PRA Results by Zone

	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	ERZ	System
PRMR	18,697	13,396	10,787	9,403	8,297	18,565	21,565	8,431	21,888	5,038	N/A	136,067
Offer Submitted (Including FRAP)	20,746	14,820	11,215	8,826	7,422	15,738	21,914	10,727	21,542	5,681	2,058	140,689
FRAP	13,961	11,216	4,248	636	0	1,109	1,352	349	166	1,616	201	34,852
Self Scheduled (SS)	4,754	3,150	6,618	5,185	7,414	9,152	20,283	9,614	18,172	3,368	1,698	89,408
Non-SS Offer Cleared	376	454	342	2,543	8	4,964	36	663	1,887	372	159	11,804
Committed (Offer Cleared + FRAP)	19,091	14,820	11,208	8,364	7,422	15,224	21,671	10,625	20,225	5,356	2,058	136,064
LCR	13,591	9,354	7,662	452	7,014	12,788	19,271	7,523	18,380	3,652	-	N/A
CIL	6,462	4,506	4,969	10,749	3,208	7,481	4,500	3,608	5,305	3,564	-	N/A
ZIA	6,460	4,506	4,911	9,857	3,208	7,197	4,490	3,444	4,794	3,564	-	N/A
Import	0	0	0	1,039	875	3,340	0	0	1,663	0	-	6,917
CEL	4,357	3,971	5,490	2,771	4,644	5,619	5,709	6,099	3,025	1,840	-	N/A
Export	394	1,424	421	0	0	0	107	2,195	0	318	2,058	6,917
ACP (\$/MW-Day)	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	N/A

Values displayed in MW SAC

Fall 2024 PRA Results by Zone

	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	ERZ	System
PRMR	16,254	12,001	9,944	8,715	7,970	17,770	19,893	7,602	20,653	4,750	N/A	125,552
Offer Submitted (Including FRAP)	19,802	14,551	10,818	8,437	5,544	15,443	21,019	10,293	20,808	5,773	2,392	134,879
FRAP	11,904	10,092	3,411	547	0	918	1,240	340	151	1,531	208	30,341
Self Scheduled (SS)	4,670	2,590	6,095	6,109	5,492	7,625	19,165	8,990	17,167	3,444	1,677	83,023
Non-SS Offer Cleared	820	187	1,195	1,606	52	5,108	286	300	1,795	707	132	12,188
Committed (Offer Cleared + FRAP)	17,394	12,870	10,701	8,262	5,544	13,651	20,691	9,629	19,112	5,681	2,016	125,551
LCR	12,337	7,152	5,281	3,674	6,416	10,750	19,443	5,499	16,631	2,482	-	N/A
CIL	6,502	5,719	6,746	6,594	3,786	8,959	4,400	5,137	6,109	4,736	-	N/A
ZIA	6,500	5,719	6,684	5,699	3,786	8,661	4,390	4,942	5,608	4,736	-	N/A
Import	0	0	0	453	2,426	4,119	0	0	1,541	0	-	8,539
CEL	5,711	4,512	6,956	3,906	5,402	3,514	5,381	4,115	2,803	2,889	-	N/A
Export	1,140	868	757	0	0	0	799	2,027	0	931	2,016	8,539
ACP (\$/MW-Day)	15.00	15.00	15.00	15.00	719.81	15.00	15.00	15.00	15.00	15.00	15.00	N/A

Values displayed in MW SAC

Winter 2024/2025 PRA Results by Zone

	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	ERZ	System
PRMR	18,528	11,704	10,628	9,300	8,375	19,180	17,366	8,977	22,194	5,127	N/A	131,377
Offer Submitted (Including FRAP)	23,738	14,545	15,243	8,097	5,986	15,888	23,032	10,121	22,877	6,338	2,575	148,438
FRAP	12,907	9,576	4,630	667	0	975	1,161	357	152	1,987	178	32,591
Self Scheduled (SS)	6,780	3,119	7,726	5,690	5,963	9,163	19,620	9,754	18,763	3,903	1,978	92,459
Non-SS Offer Cleared	0	0	484	1,563	0	2,341	55	1	1,866	7	10	6,327
Committed (Offer Cleared + FRAP)	19,687	12,695	12,840	7,920	5,963	12,479	20,836	10,112	20,782	5,897	2,167	131,377
LCR	16,972	7,189	10,804	3,133	4,062	10,219	17,597	7,379	18,888	4,809	-	N/A
CIL	4,693	5,523	5,668	6,707	4,477	8,532	4,656	4,364	5,200	3,219	-	N/A
ZIA	4,691	5,523	5,600	5,811	4,477	8,286	4,656	4,262	4,623	3,219	-	N/A
Import	0	0	0	1,380	2,412	6,701	0	0	1,412	0	-	11,905
CEL	5,174	4,772	9,011	4,674	6,229	1,401	5,753	5,780	2,323	2,993	-	N/A
Export	1,159	992	2,212	0	0	0	3,471	1,135	0	770	2,167	11,905
ACP (\$/MW-Day)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	N/A

Values displayed in MW SAC

Spring 2025 PRA Results by Zone

	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	ERZ	System
PRMR	17,217	12,183	9,992	7,981	7,711	17,847	19,670	7,891	22,066	5,234	N/A	127,792
Offer Submitted (Including FRAP)	19,201	14,896	10,946	8,654	5,847	15,173	21,218	11,029	21,026	6,144	2,480	136,615
FRAP	12,319	9,949	3,950	638	0	1,039	1,256	329	152	1,559	197	31,387
Self Scheduled (SS)	4,226	3,458	6,220	5,790	5,806	7,979	18,316	9,504	15,711	3,387	1,823	82,219
Non-SS Offer Cleared	783	801	166	1,751	41	5,374	390	687	2,959	849	385	14,185
Committed (Offer Cleared + FRAP)	17,328	14,208	10,335	8,178	5,847	14,393	19,961	10,520	18,822	5,794	2,404	127,791
LCR	13,945	8,370	5,781	4,560	6,044	11,386	16,372	4,413	18,684	3,558	-	N/A
CIL	4,943	5,034	6,572	6,982	3,892	8,045	4,883	6,195	6,113	4,628	-	N/A
ZIA	4,941	5,034	6,514	5,083	3,892	7,730	4,883	6,030	5,598	4,628	-	N/A
Import	0	0	0	0	1,864	3,454	0	0	3,244	0	-	8,562
CEL	6,318	4,601	5,815	5,102	4,984	3,414	5,601	4,865	4,298	2,740	-	N/A
Export	111	2,025	344	197	0	0	291	2,629	0	561	2,404	8,562
ACP (\$/MW-Day)	34.10	34.10	34.10	34.10	719.81	34.10	34.10	34.10	34.10	34.10	34.10	N/A

Values displayed in MW SAC

Summer Supply Offered and Cleared Comparison Trend

	Offered (ZRC)			Cleared (ZRC)		
Planning Resource	2022-23	Summer 2023	Summer 2024	2022-23	Summer 2023	Summer 2024
Generation	121,506.5	122,375.6	123,395.6	118,745.0	116,989.7	119,479.2
External Resources	3,563.9	4,514.6	4,430.4	3,563.9	4,072.5	4,309.8
Behind the Meter Generation	4,169.3	4,175.2	4,180.2	4,169.3	4,129.4	4,143.5
Demand Resources	7,574.9	8,303.5	8,660.2	7,525.0	7,694.6	8,109.4
Energy Efficiency	0.0	5.0	22.5	0.0	5.0	22.5
Total	136,814.6	139,373.9	140,688.9	134,003.2	132,891.2	136,064.4

Fall Supply Offered and Cleared Comparison Trend

	Offered (ZRC)		Cleared (ZRC)	
Planning Resource	Fall 2023	Fall 2024	Fall 2023	Fall 2024
Generation	121,403.5	119,745.3	111,713.8	111,791.5
External Resources	4,095.4	4,366.8	3,979.6	3,990.2
Behind the Meter Generation	3,874.2	3,877.9	3,842.8	3,789.7
Demand Resources	6,999.2	6,866.1	6,254.4	5,957.5
Energy Efficiency	4.9	22.5	4.8	22.5
Total	136,377.2	134,878.6	125,795.4	125,551.4

Winter Supply Offered and Cleared Comparison Trend

	Offered (ZRC)		Cleared (ZRC)	
Planning Resource	Winter 2023-2024	Winter 2024-2025	Winter 2023-2024	Winter 2024-2025
Generation	124,632.7	133,457.4	114,886.6	118,253.8
External Resources	3,937.1	3,973.0	3,334.6	3,313.3
Behind the Meter Generation	3,257.8	3,111.5	3,173.9	2,957.3
Demand Resources	7,644.4	7,866.4	6,702.4	6,822.7
Energy Efficiency	6.7	29.7	6.7	29.7
Total	139,478.7	148,438.0	128,104.2	131,376.8

Spring Supply Offered and Cleared Comparison Trend

	Offered (ZRC)		Cleared (ZRC)	
Planning Resource	Spring 2024	Spring 2025	Spring 2024	Spring 2025
Generation	119,254.7	121,303.8	110,195.8	113,091.4
External Resources	3,794.1	3,481.8	3,409.1	3,406.5
Behind the Meter Generation	4,096.4	4,201.6	4,058.9	4,180.5
Demand Resources	7,282.9	7602.9	6,720.0	7,087.2
Energy Efficiency	5.3	25.0	5.3	25.0
Total	134,433.4	136,615.1	124,389.1	127,790.6

Zone 5 Supply Offered and Cleared Comparison Trend

	Offered (ZRC)				Cleared (ZRC)			
Planning Resource	Summer 2024	Fall 2024	Winter 2024-2025	Spring 2025	Summer 2024	Fall 2024	Winter 2024-2025	Spring 2025
Generation	7,139.9	5,414.3	5,864.9	5,695.9	7,139.9	5,414.3	5,850.2	5,695.9
Behind the Meter Generation	79.9	78.5	77.1	84.0	79.9	78.5	77.1	84.0
Demand Resources	202.5	51.2	43.8	67.2	202.5	51.2	35.3	67.2
Energy Efficiency	0	0	0	0	0	0	0	0
Imports (External & Imports from other zones)	874.7	2,425.8	2,411.9	1,864.1	874.7	2,425.8	2,411.9	1,864.1
Total	8,297.0	7,969.8	8,397.7	7,711.2	8,297.0	7,969.8	8,374.5	7,711.2

Historical Summer Auction Clearing Price Comparison

PY	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	ERZs
2015-2016	\$3.48			\$150.00	\$3.48			\$3.29		N/A	N/A
2016-2017	\$19.72	\$72.00						\$2.99			N/A
2017-2018	\$1.50										N/A
2018-2019	\$1.00	\$10.00									N/A
2019-2020	\$2.99						\$24.30	\$2.99			
2020-2021	\$5.00						\$257.53	\$4.75	\$6.88	\$4.75	\$4.89-\$5.00
2021-2022	\$5.00						\$0.01			\$2.78-\$5.00	
2022-2023	\$236.66						\$2.88			\$2.88-236.66	
Summer 2023	\$10.00										
Summer 2024	\$30.00										

- Auction Clearing Prices shown in \$/MW-Day
- Conduct Threshold is 10% of Cost of New Entry (CONE) and applies to all seasons.

Fall Auction Clearing Price Comparison

PY	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	ERZs
Fall 2023	\$15.00								\$59.21	\$15.00	
Fall 2024	\$15.00				\$719.81		\$15.00				
IMM Conduct Threshold	34.12	33.35	32.22	33.27	36.09	32.97	34.83	31.18	30.91	30.76	36.09
Cost of New Entry (Daily)	341.21	333.51	322.19	332.70	360.89	329.70	348.32	311.81	309.05	307.57	360.89
Cost of New Entry (Annual)	124,541	121,731	117,600	121,434	131,725	120,340	127,135	113,810	112,804	112,263	131,725

- There was price separation in the fall for Zone 5 since it did not have sufficient supply within the zone to meet its local clearing requirement
- Auction Clearing Prices shown in \$/MW-Day
- Conduct Threshold is 10% of Daily Cost of New Entry (CONE) and applies to all seasons
- For Zone 5, there were 183 shortage-days (fall and spring); ACP is Annual CONE / # of shortage-days: $131,725 / 183 = \$719.81$

Winter Auction Clearing Price Comparison

PY	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	ERZs
Winter 2023-24	\$2.00								\$18.88	\$2.00	
Winter 2024-25	\$0.75										

- Auction Clearing Prices shown in \$/MW-Day
- Conduct Threshold is 10% of Cost of New Entry (CONE) and applies to all seasons

Spring Auction Clearing Price Comparison

PY	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	ERZs
Spring 2024	\$10.00										
Spring 2025	\$34.10				\$719.81	\$34.10					

- There was price separation in the Spring for Zone 5 since it did not have sufficient supply within the zone to meet its local clearing requirement
- Auction Clearing Prices shown in \$/MW-Day
- Conduct Threshold is 10% of Cost of New Entry (CONE) and applies to all seasons

Summer 2024 Offered Capacity & PRMR (MW)



Summer 2024 Cleared Capacity, Imports & Exports (MW)



Fall 2024 Offered Capacity & PRMR (MW)



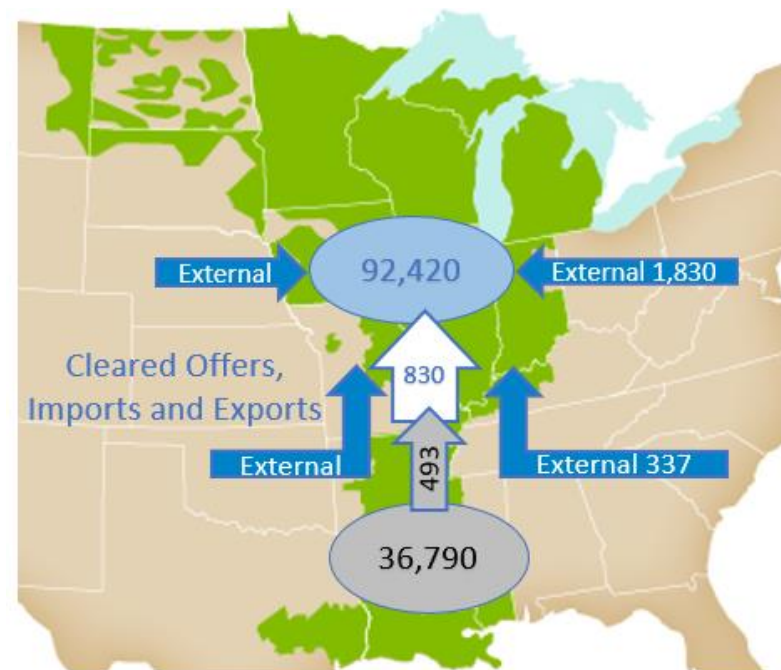
Fall 2024 Cleared Capacity, Imports & Exports (MW)



Winter 2024/25 Offered Capacity & PRMR (MW)



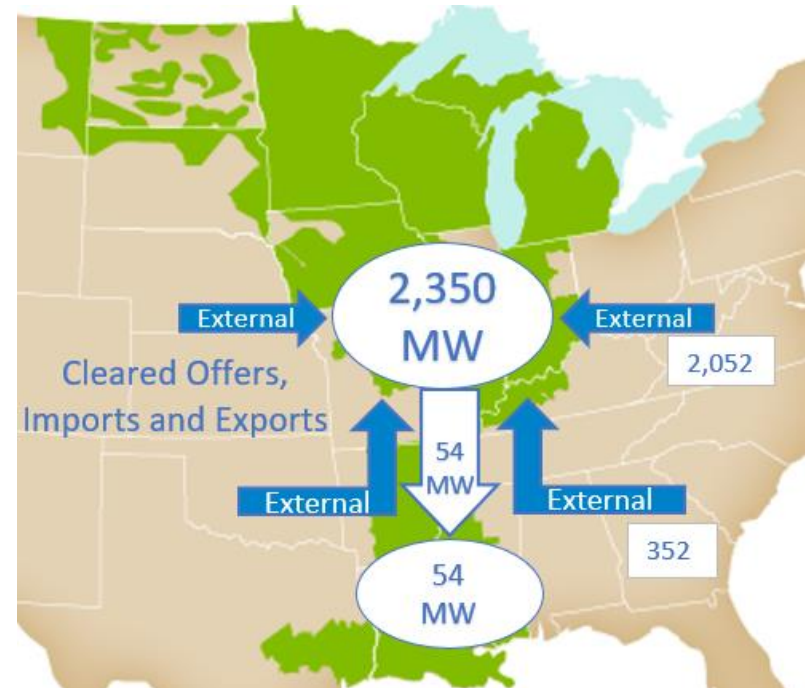
Winter 2024/25 Cleared Capacity, Imports & Exports (MW)



Spring 2025 Offered Capacity & PRMR (MW)



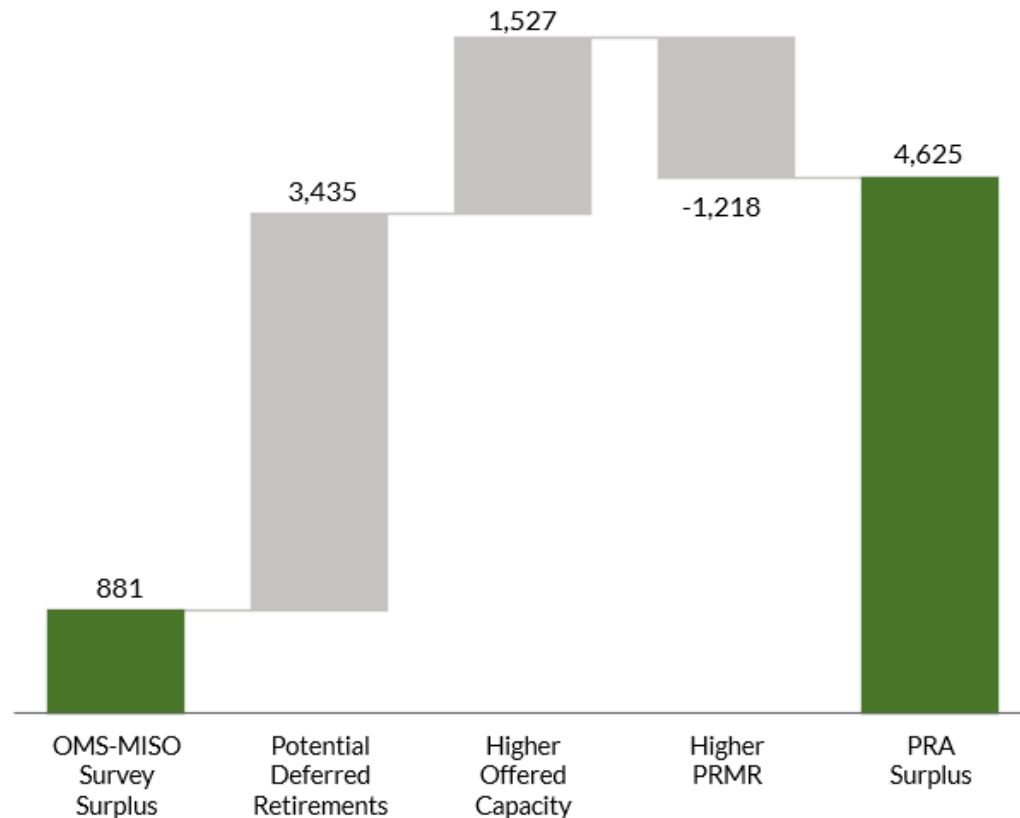
Spring 2025 Cleared Capacity, Imports & Exports (MW)



2024 PRA showed a higher surplus relative to the 2023 OMS-MISO survey projection, driven primarily by deferred retirements

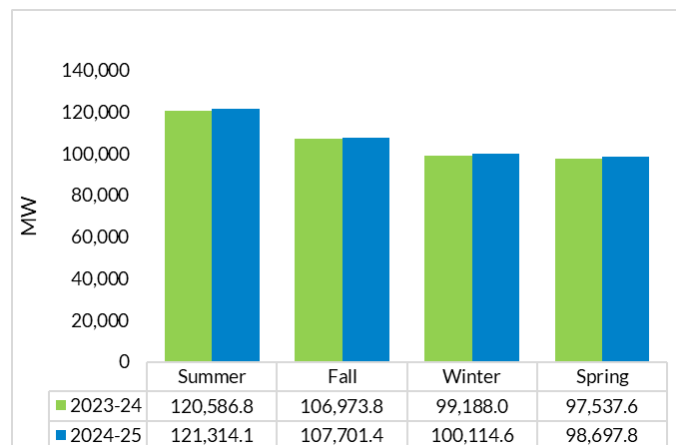
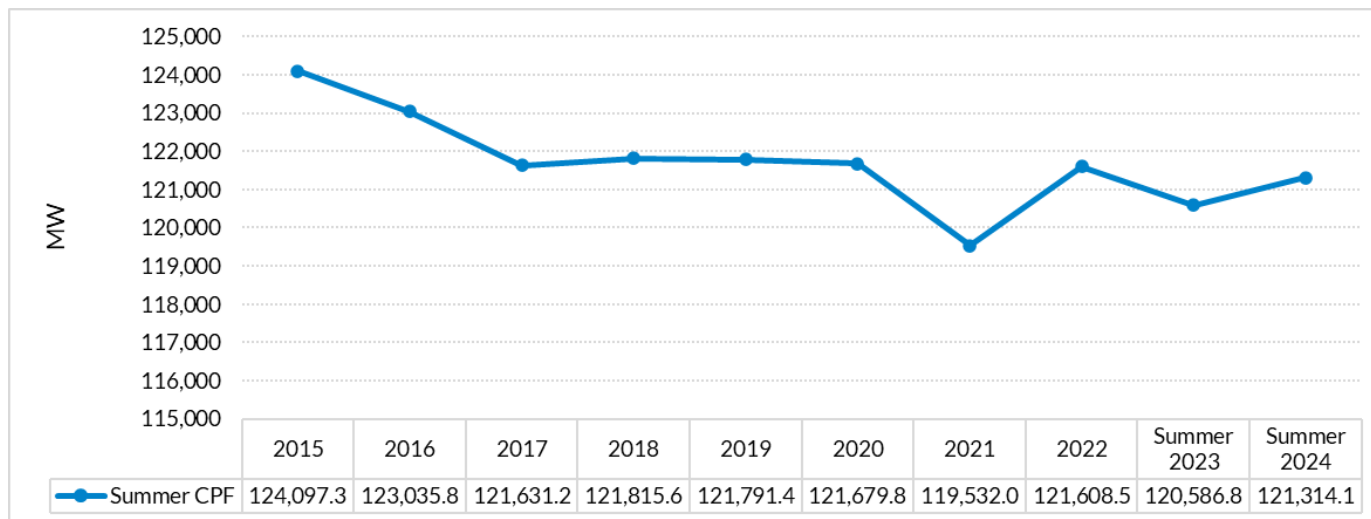
Summer 2024 PRA outcomes vs. 2023 OMS-Survey results

- 3.4 of the 3.5 GW of potential deferred retirement participated in the PRA
- Resources offered in the PRA at 1.5 GW higher than projected in the OMS-MISO Survey
- 1.2 GW higher PRMR MISO-wide because of a higher PRM % than forecasted in the 2023 survey (9% versus 7.9%)

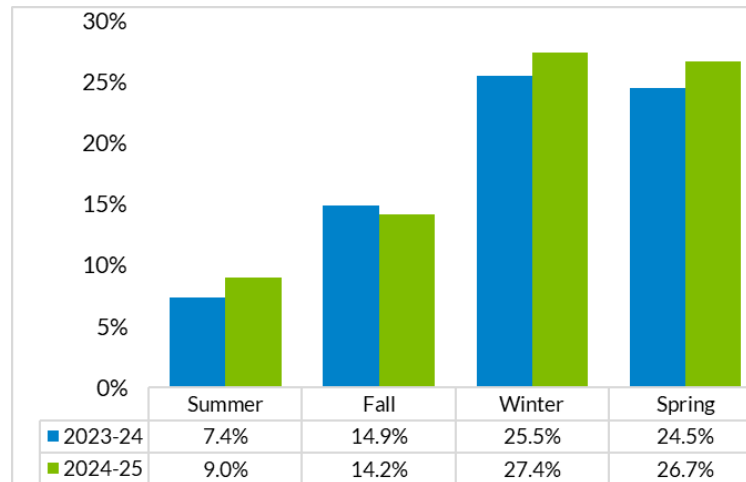
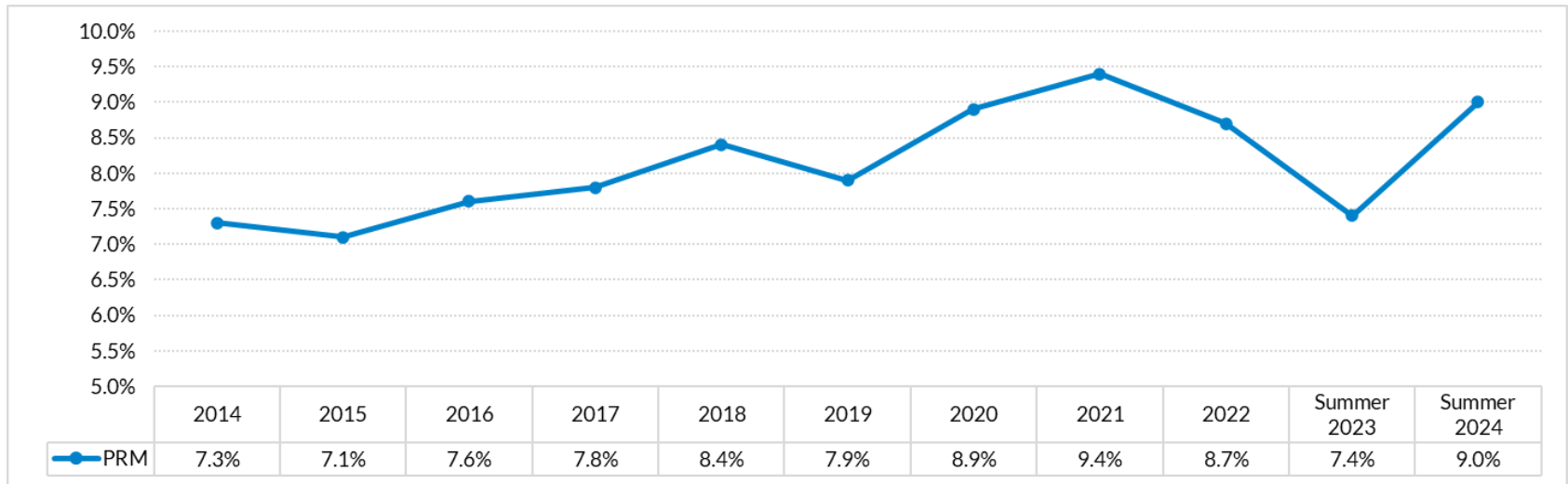


Coincident Peak Forecast

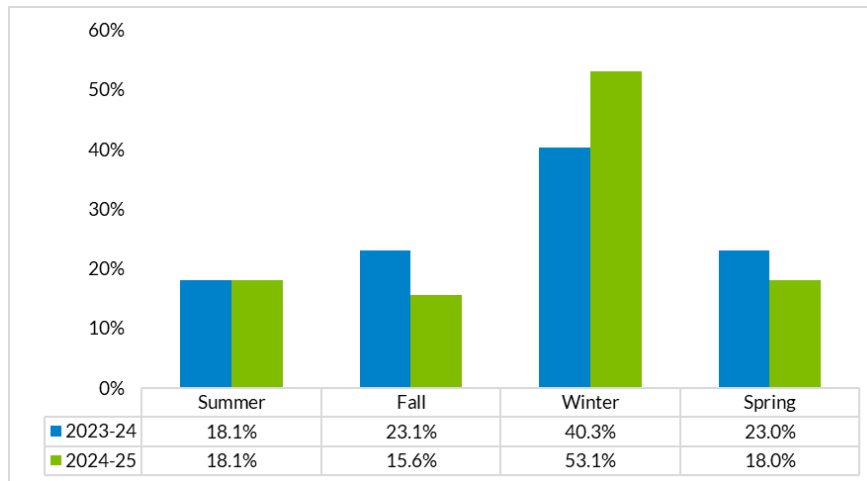
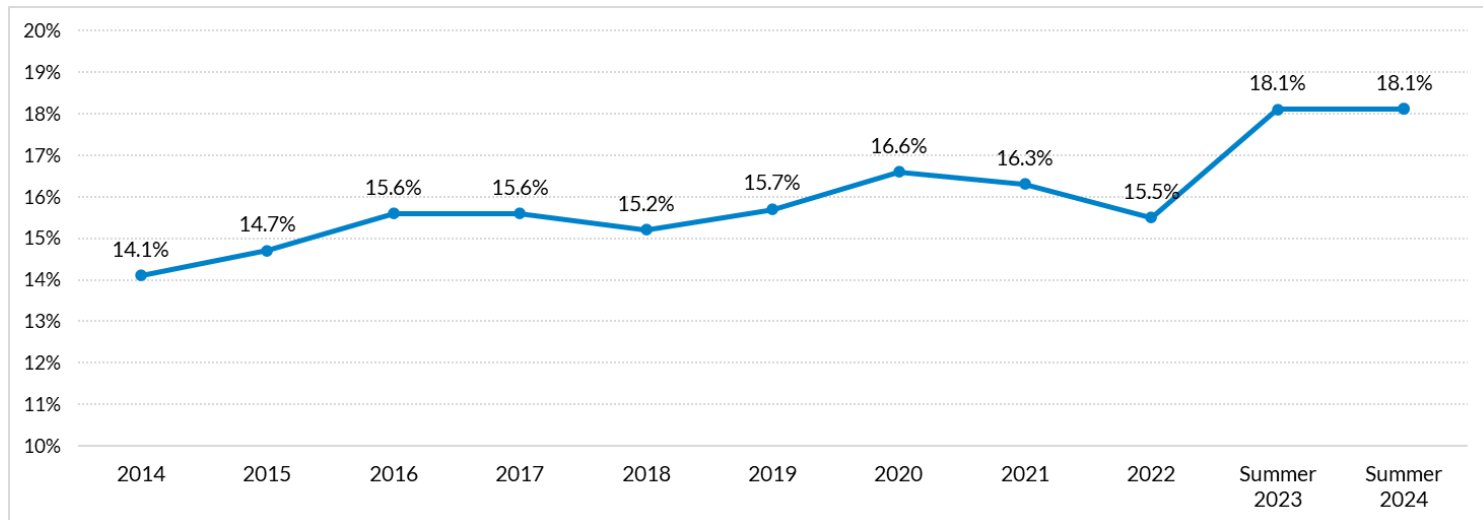
Year over year the Summer CPF (+0.7 GW), PRM (+1.6%) and PRMR (+3.2 GW) are higher.



Planning Reserve Margin (%)

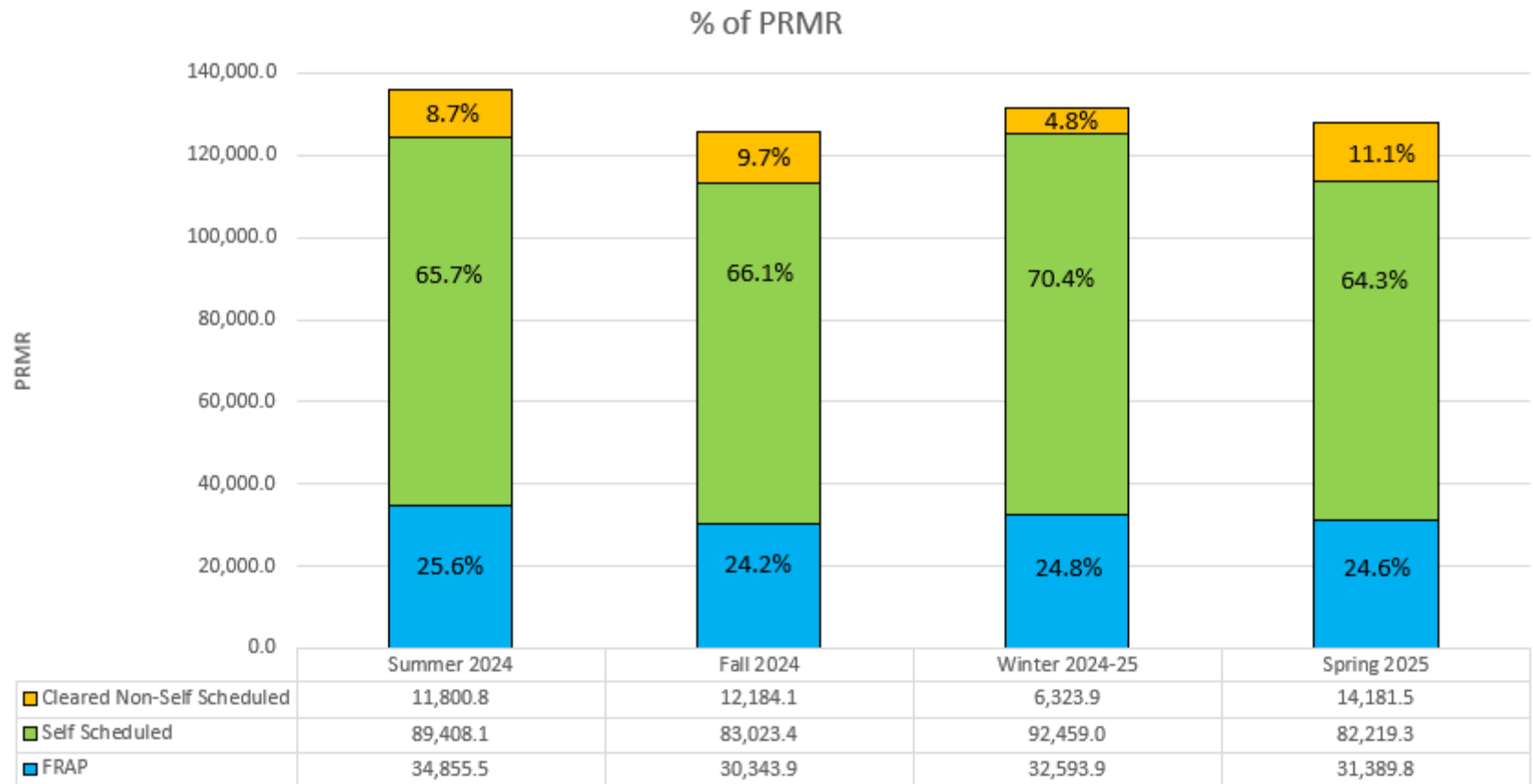


Wind Effective Load Carrying Capacity (%)



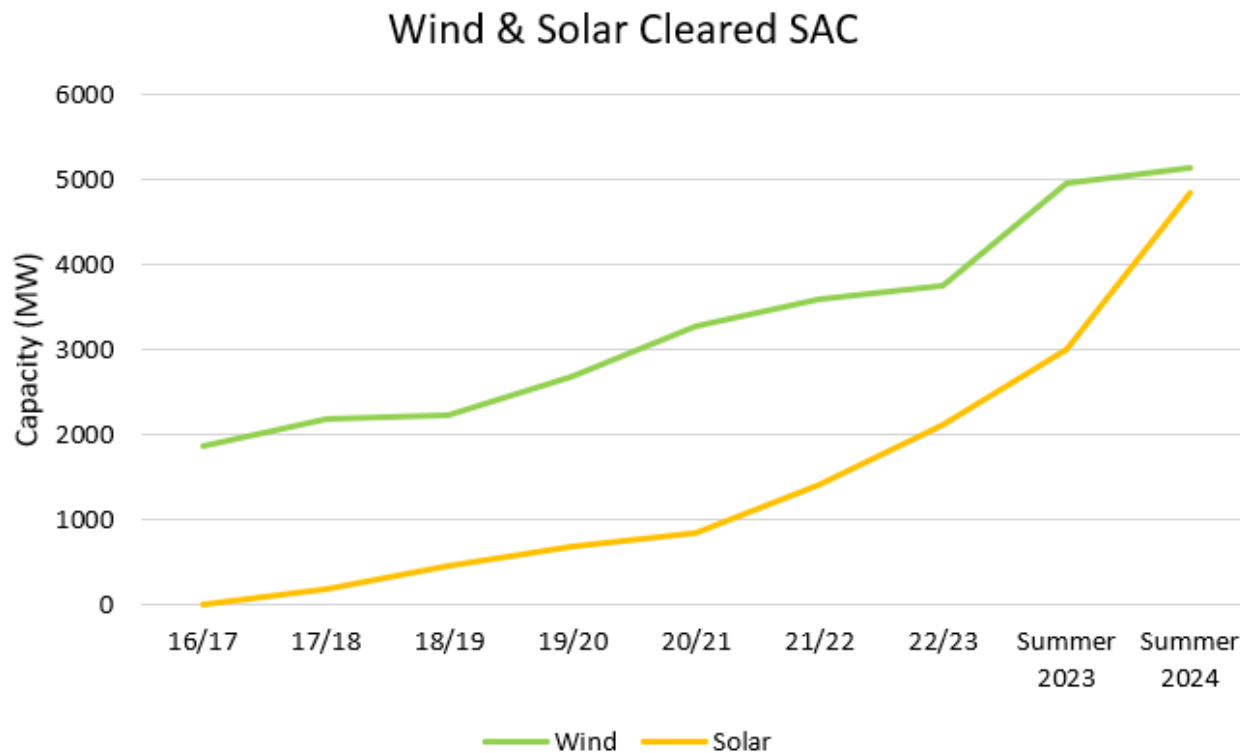
- No change to wind or solar accreditation methodology from previous years.
- Methodology applied on a seasonal basis.
- Wind ELCC and new solar capacity is established in the LOLE Study
- New solar
 - summer, fall, spring 50%
 - winter 5%

2024-2025 Seasonal Resource Adequacy Requirements are fulfilled similarly across all four seasons



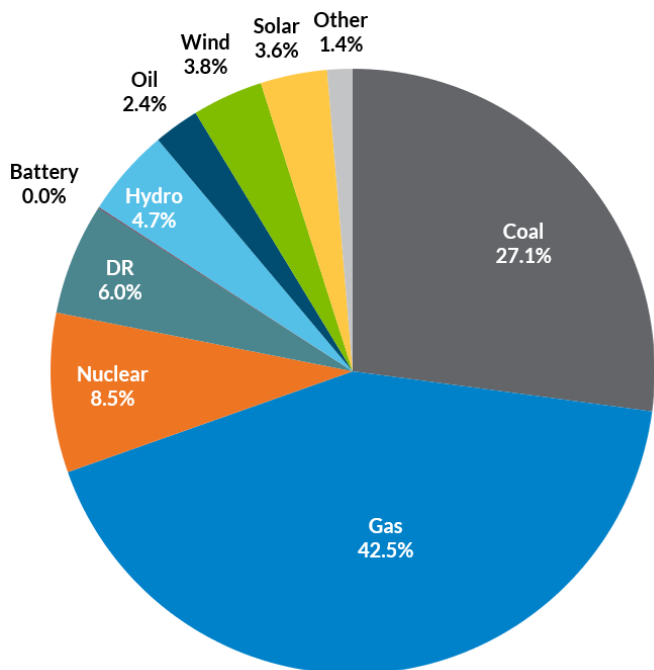
Although conventional generation still comprises most of the capacity, wind and solar continue to grow

- 4.9 GW of solar cleared this year's auction, an increase of 61% from Planning Year 2023-24 (3.0 GW)
- 5.2 GW of wind cleared this year, an increase of 4% compared to last year (5.0 GW)



Winter PRMR is 4.7 GW (3.4%) lower than the summer. There were less thermal, hydro and solar resources and significantly more wind to meet PRMR in the Winter versus the Summer

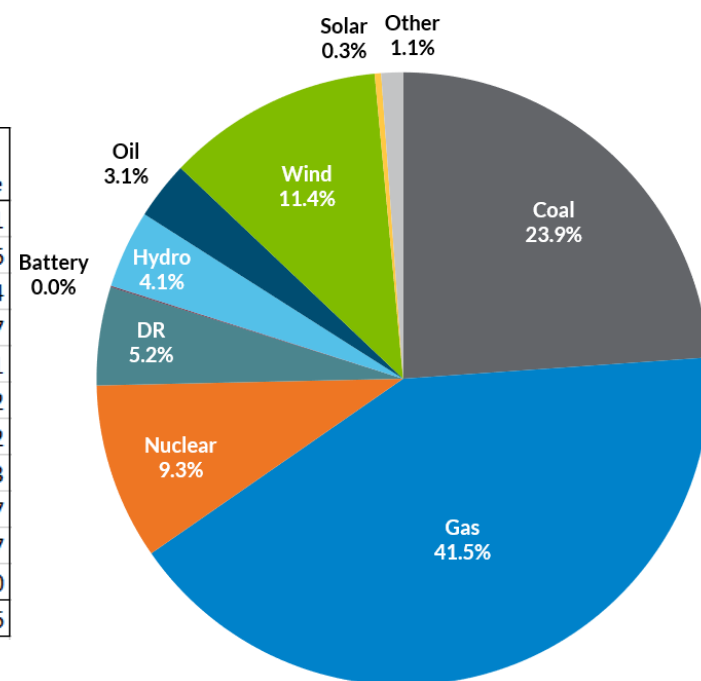
Summer 2024



MISO-wide

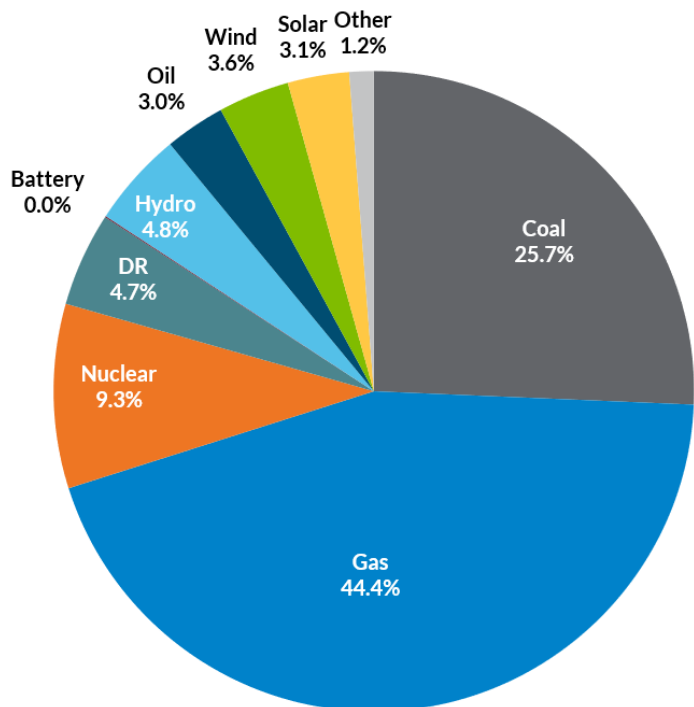
Cleared ZRC	Summer 2024	Winter 2024-25	Difference
Coal	36,894.8	31,391.7	5,503.1
Gas	57,799.3	54,460.7	3,338.6
Nuclear	11,594.6	12,218.0	-623.4
DR	8,109.4	6,822.7	1,286.7
Battery	59.0	59.1	-0.1
EE	22.5	29.7	-7.2
Hydro	6,427.1	5,398.9	1,028.2
Oil	3,316.6	4,010.9	-694.3
Wind	5,150.0	15,034.7	-9,884.7
Solar	4,851.7	445.0	4,406.7
Misc	1,839.4	1,505.4	334.0
PRMR	136,064.4	131,376.8	4,687.6

Winter 2024-25



Fall 2024 and Spring 2025 - Cleared ZRCs and PRMR

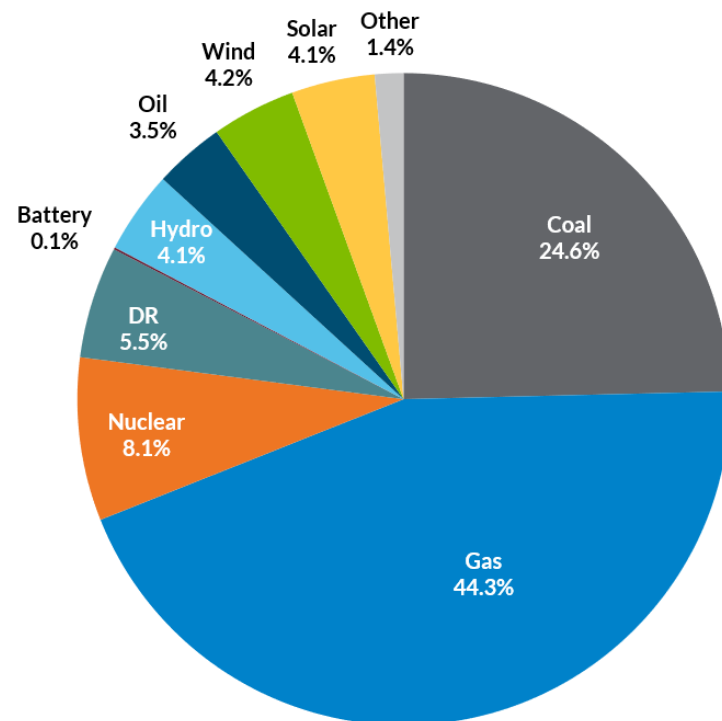
Fall 2024



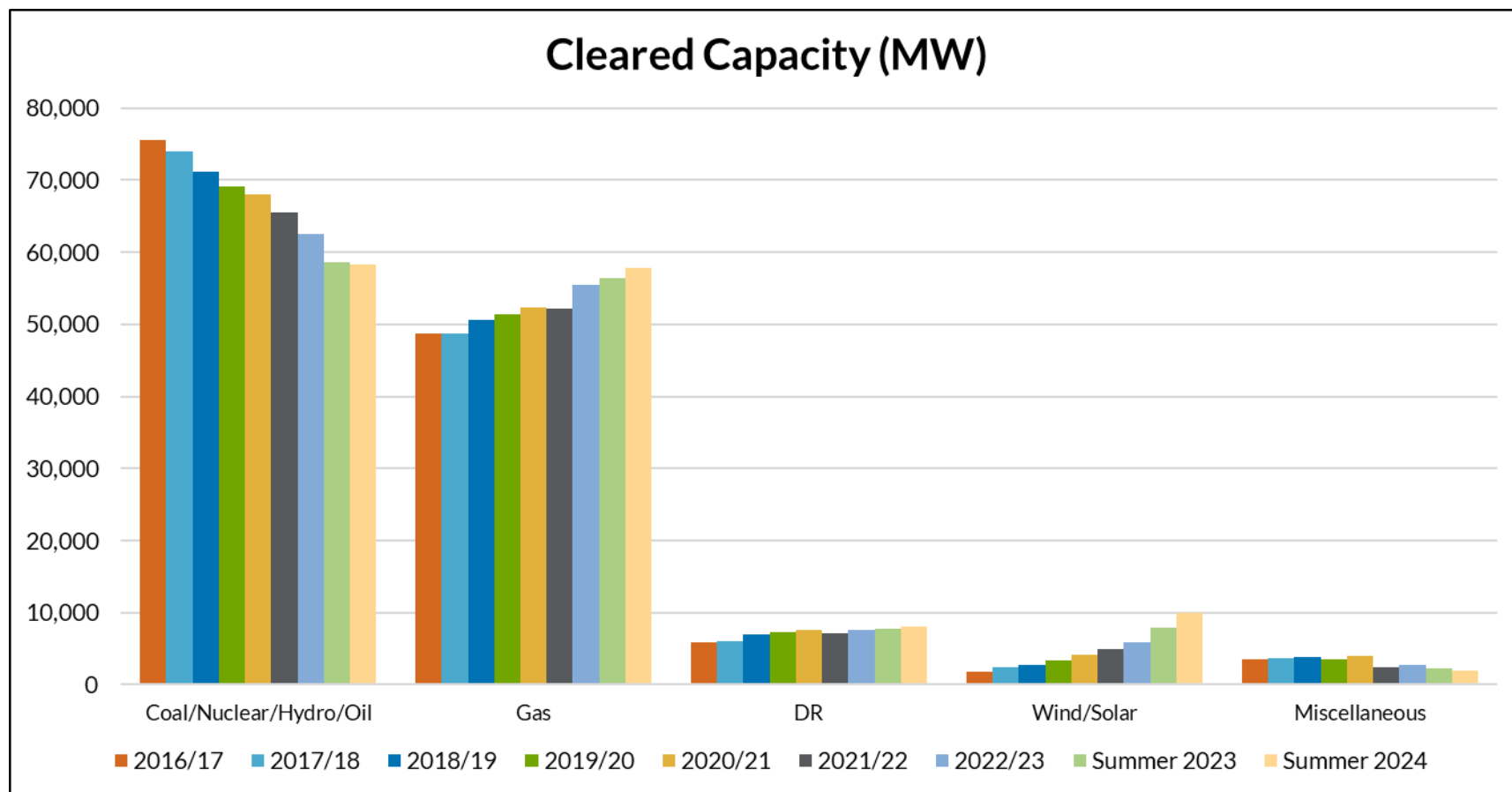
MISO-Wide

Cleared ZRC	Fall 2024	Spring 2025
Coal	32,221.7	31,469.1
Gas	55,793.3	56,667.0
Nuclear	11,682.3	10,338.7
DR	5,957.5	7,087.2
Battery	58.8	112.3
EE	22.5	25.0
Hydro	6,037.8	5,215.6
Oil	3,819.2	4,464.0
Wind	4,521.8	5,322.7
Solar	3,894.4	5,282.1
Misc	1,542.1	1,807.0
PRMR	125,551.4	127,790.6

Spring 2025

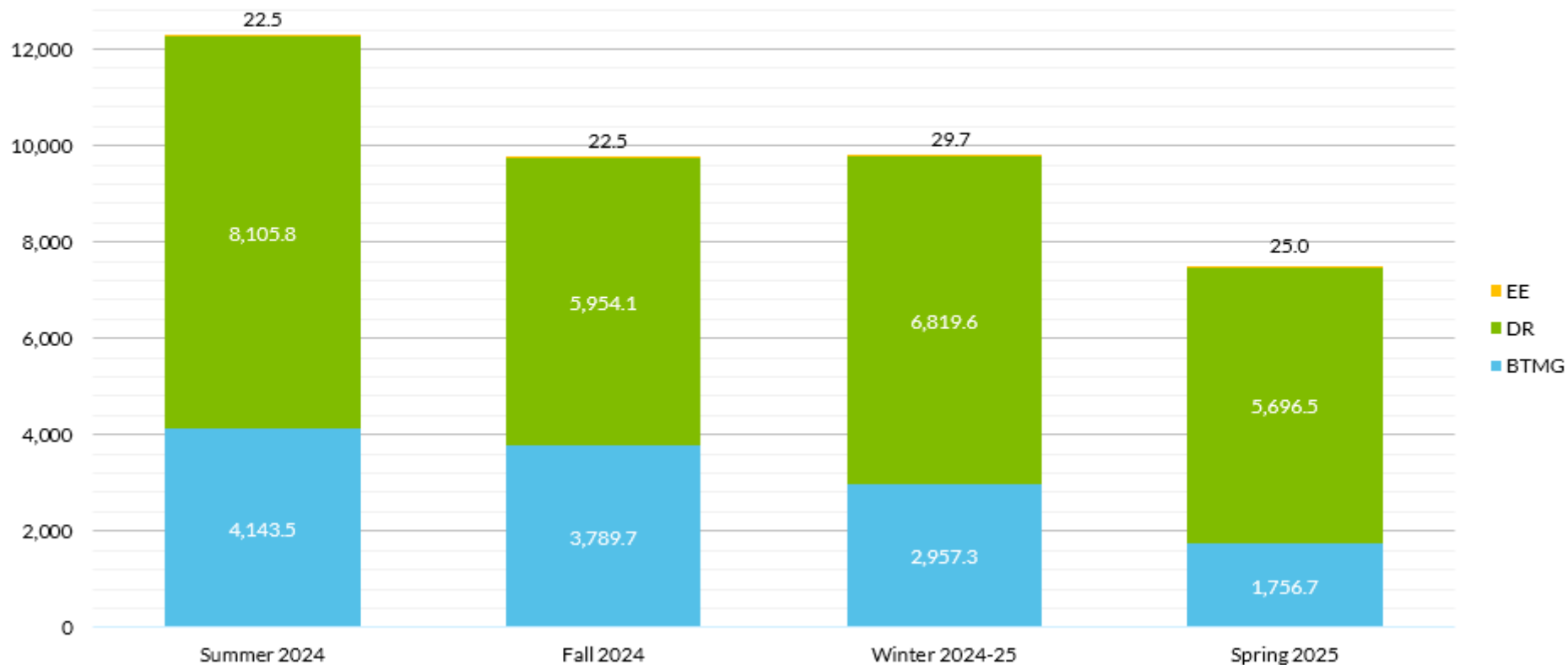


The planning resource mix shows the continuation of a multi-year trend towards less coal/nuclear/hydro/oil and increased gas and non-conventional resources



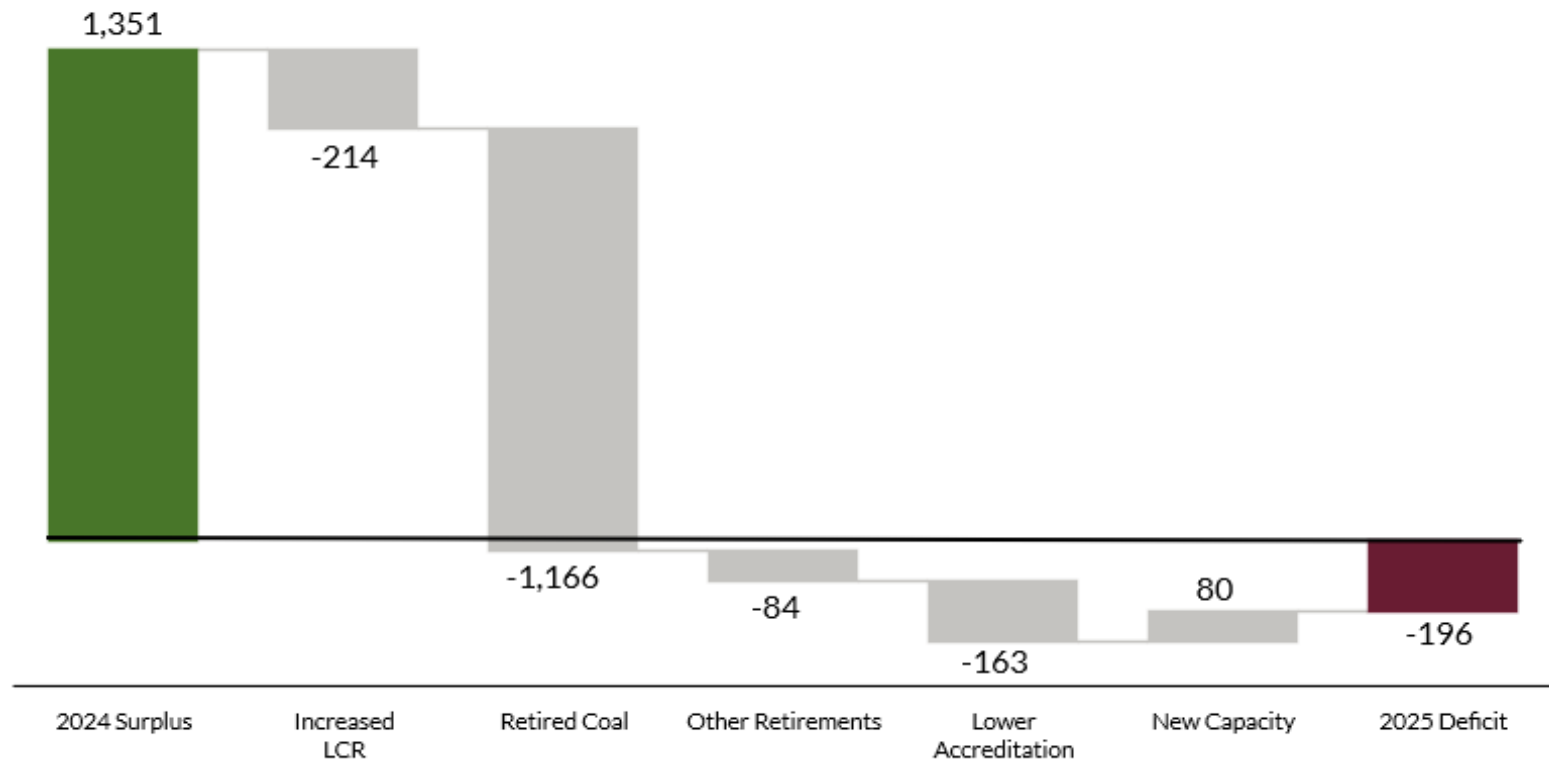
2024-2025 Seasonally Cleared Load Modifying Resources Comparison

Capacity of Load-Modifying Resources Clearing PRA (MW)



A combination of higher Local Clearing Requirement and reduced capacity contributed to Zone 5 deficiency in the spring

Zone 5 Spring 2025 Capacity Changes Year-Over-Year



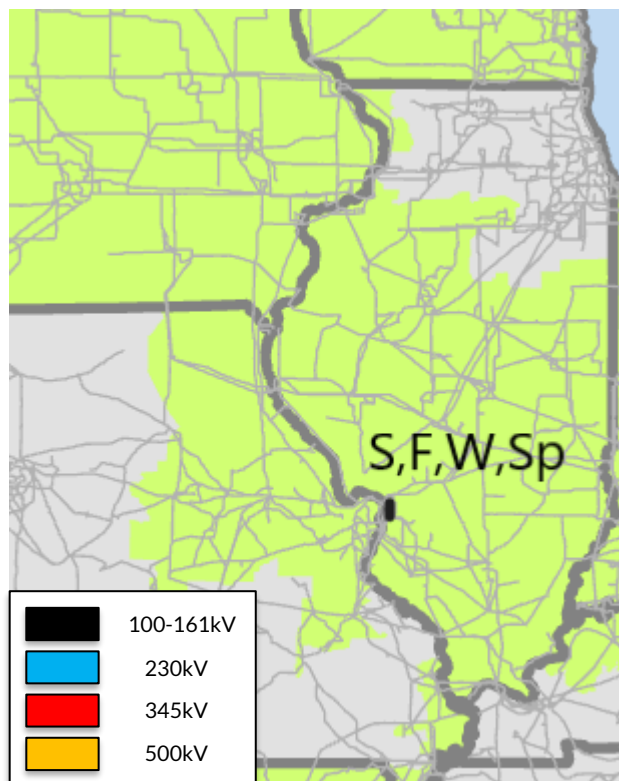
Zone 5 Local Clearing Requirement

		Summer		Difference		Fall		Difference	
		2024	2023	MW	%	2024	2023	MW	%
(A)	Zonal Coincident Peak Forecast (ZCPF)	7,532.3	7,450.3			6,911.9	6,591.9		
(B)	<u>Transmission Loss (TL) for ZCPF (MW)</u>	<u>147.9</u>	<u>130.7</u>			<u>168.2</u>	<u>115.2</u>		
(C)=(A)+(B)	LRZ Peak Demand	7,680.2	7,581.0	99.2	1.3%	7,080.1	6,707.1	373.0	5.6%
(D)	LRR UCAP/LRZ Peak Demand from LOLE	1.331	1.333			1.441	1.452		
(E)=(C)*(D)	Local Reliability Requirement (LRR)	10,222.3	10,105.5	116.9	1.2%	10,202.4	9,738.7	463.7	4.8%
(F)	Zonal Import Ability (ZIA)	3,208.0	3,576.0	(368.0)	-10.3%	3,786.0	5,380.0	(1,594.0)	-29.6%
(G)	Controllable Exports	0.0	0.0			0.0	0.0		
(H)=(E)-(F)-(G)	Local Clearing Requirement (LCR)	7,014.3	6,529.5	484.9	7.4%	6,416.4	4,358.7	2,057.7	47.2%
		Winter		Difference		Spring		Difference	
		2024-25	2023-24	MW	%	2025	2024	MW	%
(A)	Zonal Coincident Peak Forecast (ZCPF)	6,397.0	6,483.2			6,023.0	5,921.4		
(B)	<u>Transmission Loss (TL) for ZCPF (MW)</u>	<u>247.8</u>	<u>188.3</u>			<u>117.6</u>	<u>109.8</u>		
(C)=(A)+(B)	LRZ Peak Demand	6,644.8	6,671.5	(26.7)	-0.4%	6,140.6	6,031.2	109.4	1.8%
(D)	LRR UCAP/LRZ Peak Demand from LOLE	1.285	1.474			1.618	1.610		
(E)=(C)*(D)	Local Reliability Requirement (LRR)	8,538.6	9,833.8	(1,295.2)	-13.2%	9,935.5	9,710.2	225.3	2.3%
(F)	Zonal Import Ability (ZIA)	4,477.0	3,811.0	666.0	17.5%	3,892.0	3,881.0	11.0	0.3%
(G)	Controllable Exports	0.0	0.0			0.0	0.0		
(H)=(E)-(F)-(G)	Local Clearing Requirement (LCR)	4,061.6	6,022.8	(1,961.2)	-32.6%	6,043.5	5,829.2	214.3	3.7%

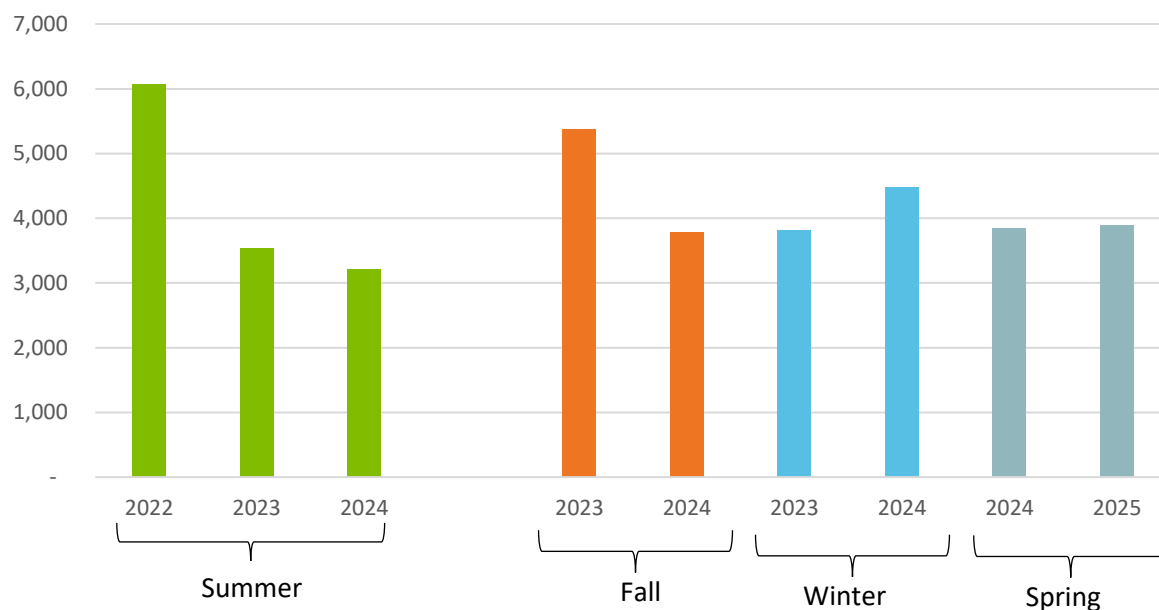
Capacity Import Limits

Zone 5: Missouri

LRZ5	Monitored Element	Monitored Element Rating	Contingency	CIL
Summer 2024	Moro - Miles 138 kV	305 MVA	Roxford - Moro 345 kV	3208
Fall 2024	Moro - Miles 138 kV	305 MVA	Roxford - Moro 345 kV	3786
Winter 2024/25	Moro - Miles 138 kV	329 MVA	Roxford - Moro 345 kV	4477
Spring 2025	Moro - Miles 138 kV	305 MVA	Roxford - Moro 345 kV	3892



LRZ5 Capacity Import Limit (MW)





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