

2024 Fourth Quarter Synchronized Reserve Performance

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Operations Committee
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2024	Total Number of Events	Number of Events ≥ 10 min
Q1	4	1
Q2	4	0
Q3	6	3
October	1	0
November	3	1
December	1	0
Year To Date	19	5



Synchronized Reserve Response

Summation of All Response MW (October, November)

Event	1		
Date	10/22/24		
Start Time	10:02:33		
End Time	10:08:44		
Duration	00:06:11		
Region	RTO		
Resource Type	Gen	DR	Total
Assigned (MW)	1581	205	1786
Estimated Expected Response (MW)	978	126	1104
Actual Response (MW)	933	191	1124
Percent Response To Estimated Expected Response (%)	95%	151%	102%
Penalty (MW)	0	0	0

Event	1			2			3		
Date	11/10/24			11/27/24			11/29/24		
Start Time	00:20:29			19:36:59			11:03:05		
End Time	00:31:18			19:46:56			11:10:26		
Duration	00:10:49			00:09:57			00:07:21		
Region	RTO			RTO			RTO		
Resource Type	Gen	DR	Total	Gen	DR	Total	Gen	DR	Total
Assigned (MW)	1439	481	1919	2066	487	2552	2235	280	2515
Estimated Expected Response (MW)	1439	481	1919	2055	484	2540	1643	206	1849
Actual Response (MW)	1032	451	1483	1453	438	1891	1215	235	1451
Percent Response To Estimated Expected Response (%)	72%	94%	77%	71%	90%	74%	74%	114%	78%
Penalty (MW)	407	30	436	0	0	0	0	0	0



Synchronized Reserve Response

Summation of All Response MW (December)

Event	1		
Date	12/11/24		
Start Time	08:21:22		
End Time	08:27:22		
Duration	00:06:00		
Region	RTO		
Resource Type	Gen	DR	Total
Assigned (MW)	1872	643	2515
Estimated Expected Response (MW)	1123	386	1509
Actual Response (MW)	821	431	1253
Percent Response To Estimated Expected Response (%)	73%	112%	83%
Penalty (MW)	0	0	0



Synchronized Reserve Response Summation Response MW By Portfolio

Event Date	Duration (HH:MM:SS)	Gen					DR				
		Assignment (MW)	Response By Total Resource (MW) ¹	Response By Total Resource (%)	Netted Response By Portfolio (MW) ²	Netted Response By Portfolio (%)	Assignment (MW)	Response By Total Resource (MW) ¹	Response By Total Resource (%)	Netted Response By Portfolio (MW) ²	Netted Response By Portfolio (%)
10/22/2024	00:06:11	1,581	933	59%	950	60%	205	191	93%	201	98%
11/10/2024	00:10:49	1,439	1,032	72%	1,120	78%	481	451	94%	473	98%
11/27/2024	00:09:57	2,066	1,453	70%	1,593	77%	487	438	90%	457	94%
11/29/2024	00:07:21	2,235	1,215	54%	1,268	57%	280	235	84%	254	91%
12/11/2024	00:06:00	1,872	821	44%	850	45%	643	431	67%	462	72%

2024	Synchronized Reserve Response						Zone	
	Generation		Response Percent	DSR		Response Percent	RTO	MAD
	Response	Assigned		Response	Assigned			
2024 Q1	3,637	8,556	43%	1,132	1,428	79%	3	1
2024 Q2	3,104	7,847	40%	753	1,320	57%	4	0
2024 Q3	7,269	13,428	54%	1,998	2,514	79%	6	0
Oct	933	1,581	59%	191	205	93%	1	0
Nov	3,700	5,739	64%	1,124	1,248	90%	3	0
Dec	821	1,872	44%	431	643	67%	1	0
YTD	19,466	39,024	50%	5,629	7,356	77%	18	1

Ten Minute Or Greater Event Performance

2024	Synchronized Reserve Response						Zone	
	Generation		Response Percent	DSR		Response Percent	RTO	MAD
	Response	Assigned		Response	Assigned			
2024 Q1	706	1,843	38%	20	100	20%	0	1
2024 Q2	0	0	100%	0	0	100%	0	0
2024 Q3	3,483	6,366	55%	1,104	1,193	93%	2	0
Oct								
Nov	1,032	1,439	72%	451	481	94%	1	0
Dec								
YTD	5,221	9,648	54%	1,575	1,774	89%	3	1

2024	Synchronized Reserve Penalties (\$)
Q1	262,251.22
Q2	0.00
Q3	1,032,809.04
October	0.00
November	142,893.97
December	0.00
Year To Date	1,437,954.23

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Appendix

- 1: “Response by Total Resource (MW)” is the performance based on each resource that has a reserve assignment where the resource performance is capped at 100%.
- 2: “Netted Response by Portfolio (MW)” is the performance based on the organization’s portfolio where performance is netted across all resources that have a reserve assignment for each organization. This allows an over-performing resource to offset an under-performing resource within the same organization. Each organization’s performance is capped at 100%. This reflects the way penalties are administered.