



# 2021 Fourth Quarter Synchronized Reserve Performance

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Operations Committee

March 10, 2022

# Number Of Events



2021	Total Number of Events	Number of Events $\geq$ 10 min
1 <sup>st</sup> Quarter	2	1
2 <sup>nd</sup> Quarter	5	2
3 <sup>rd</sup> Quarter	5	1
October	2	0
November	3	1
December	1	0
Year To Date	18	5

# Synchronized Reserve Response



Event Date	Event Duration (HH:MM:SS)	Tier 1 Estimate (MW)	Tier 1 Response (MW)	Tier 2 Assigned (MW)	Tier 2 Response (MW)
10/11/21	00:09:18	1,216	578	894	894
10/16/21	00:07:39	1,060	669	853	853
11/12/21	00:12:05	510	607	891	715
11/30/21	00:09:33	899	678	958	958
11/30/21	00:08:26	949	452	856	856
12/08/21	00:07:49	482	289	1,376	1,376

\*Tier 2 Response is equal to Tier 2 Assigned for events less than ten minutes

# All Event Performance



2021	Tier 1 Response			Tier 2 Response						Zone	
	Generation Response	Response Percent	DSR Response	Generation		Response Percent	DSR		Response Percent	RTO	MAD
			Non-Tier 1 Estimate	Response	Assigned		Response	Assigned			
2021 Q1	1,213	35%	152	636	929	69%	478	529	90%	2	0
2021 Q2	5,529	59%	237	809	881	92%	574	697	82%	5	0
2021 Q3	2,351	59%	352	3,377	3,417	99%	1,410	1,599	88%	5	0
Oct	1,247	55%	161	1,206	1,206	100%	540	540	100%	2	0
Nov	1,737	74%	199	1,932	2,103	92%	597	602	99%	3	0
Dec	289	60%	57	1,112	1,112	100%	265	265	100%	1	0
YTD	12,366	56%	1,158	9,074	9,649	94%	3,863	4,232	91%	18	0

# Ten Minute Or Greater Event Performance



2021	Tier 1 Response			Tier 2 Response						Zone	
	Generation Response	Response Percent	DSR Response	Generation		Response Percent	DSR		Response Percent	RTO	MAD
			Non-Tier 1 Estimate	Response	Assigned		Response	Assigned			
2021 Q1	635	47%	117	304	597	51%	236	287	82%	1	0
2021 Q2	1,421	54%	127	634	706	90%	373	497	75%	2	0
2021 Q3	598	68%	42	525	564	93%	143	332	43%	1	0
Oct											
Nov	607	119%	104	447	618	72%	268	273	98%	1	0
Dec											
YTD	3,261	61%	390	1,910	2,486	77%	1,020	1,389	73%	5	0

# Tier 1 Credits And Tier 2 Penalties



2021	Tier 1 Credits	Tier 2 Penalties
1 <sup>st</sup> Quarter	\$22,525	\$86,640
2 <sup>nd</sup> Quarter	\$78,540	\$152,762
3 <sup>rd</sup> Quarter	\$189,376	\$265,855
October	\$27,268	\$0
November	\$50,940	\$475,891
December	\$7,188	\$0
Year To Date	\$375,837	\$981,148



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**2021 Fourth Quarter Synchronized Reserve  
Performance**



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