



Reserve Price Formation Update

Market Implementation Committee
2/8/2023

- The average monthly reserve clearing prices in January, 2023 are similar to those in previous months in Day-ahead Market and Real-time Market except during the Winter Storm Elliot in December.



Monthly Reserve Market Clearing Price Summary

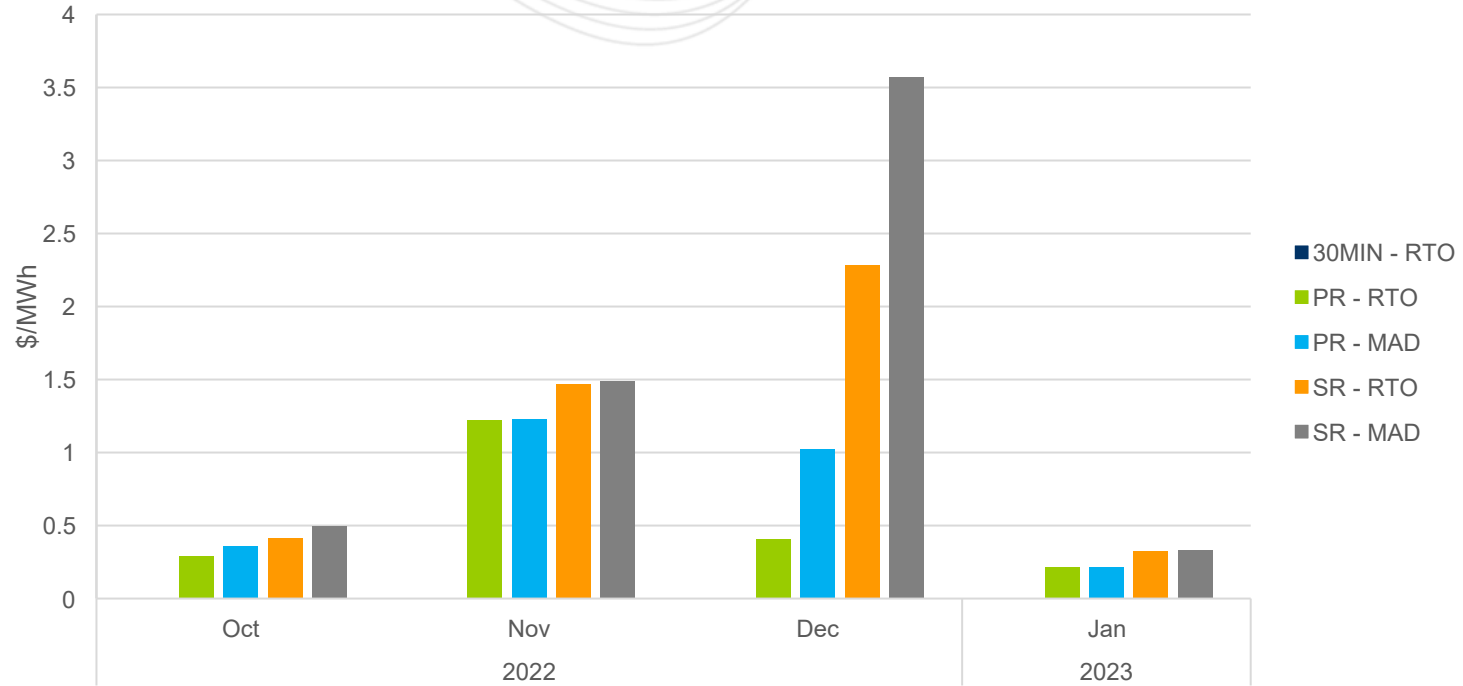
Month	Day-Ahead					Real-Time				
	SRMCP (\$/MWh)		NSRMCP (\$/MWh)		SecRMCP (\$/MWh)	SRMCP (\$/MWh)		NSRMCP (\$/MWh)		SecRMCP (\$/MWh)
	RTO	MAD	RTO	MAD	RTO	RTO	MAD	RTO	MAD	RTO
Oct. 2022	0.41	0.50	0.29	0.36	0	0.76	0.80	0.11	0.11	0
Nov. 2022	1.47	1.49	1.22	1.23	0	0.35	0.35	0.02	0.02	0
Dec. 2022	2.28	3.57	0.41	1.02	0	24.41	35.66	18.38	28.68	0.97
Jan. 2023	1.12	1.47	0.53	0.70	0	0.88	1.01	0.62	0.75	0

Month	Reserve Offer Price Cap
Oct. 2022	\$0.02/MWh
Nov. 2022	\$0.02/MWh
Dec. 2022	\$0.11/MWh
Jan. 2023	\$0.09/MWh
Feb. 2023	\$0.14/MWh

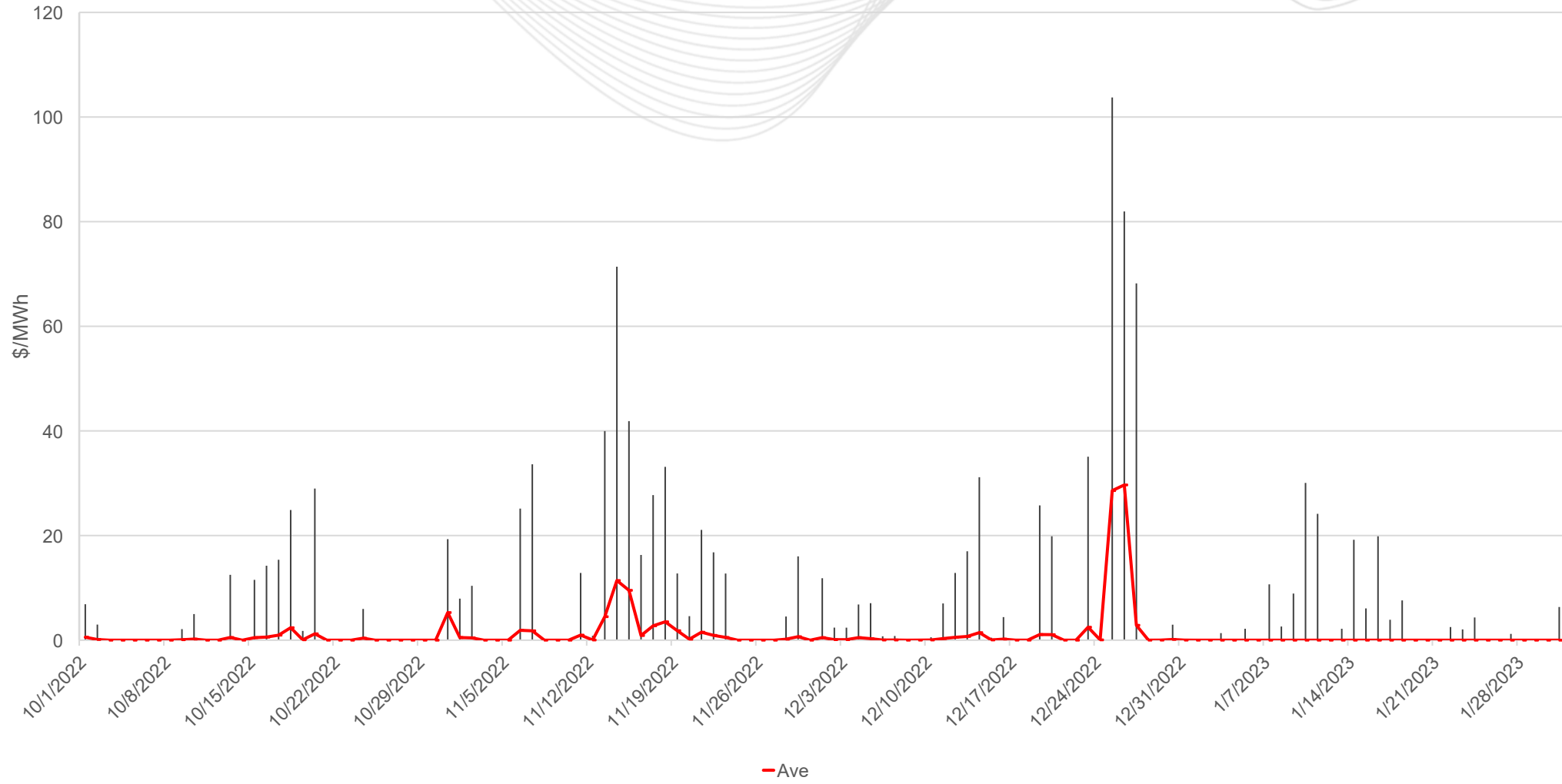


Day-Ahead Market Metrics

October, 2022 – January, 2023



SRMCP (Daily Max vs. Average)

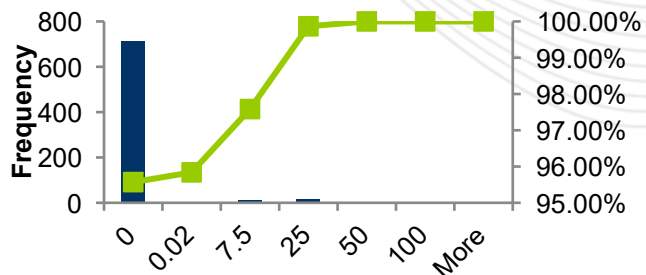




SRMCP Distribution & Histogram: Oct, 2022 – Jan, 2023

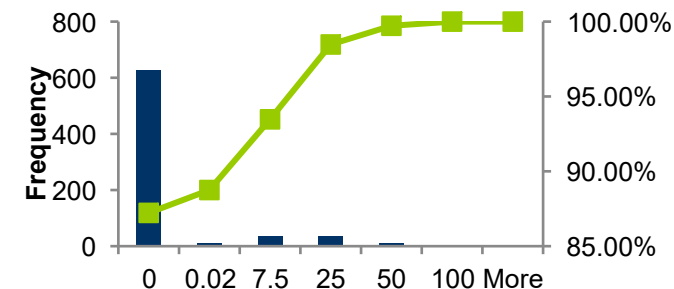
Price	Frequency	Cumulative %
0	712	95.57%
0.02	2	95.84%
7.5	13	97.58%
25	17	99.87%
50	1	100.00%
100	0	100.00%
More	0	100.00%

SRMCP (Oct, 2022)



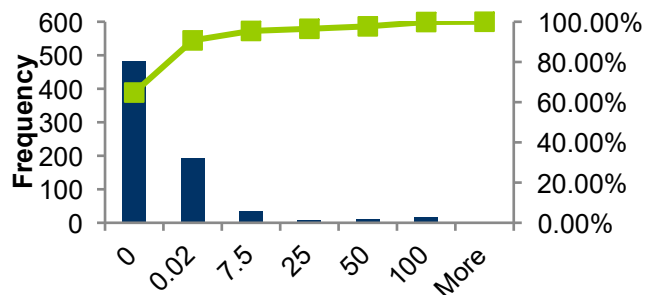
Price	Frequency	Cumulative %
0	628	87.22%
0.02	11	88.75%
7.5	34	93.47%
25	36	98.47%
50	9	99.72%
100	2	100.00%
More	0	100.00%

SRMCP (Nov, 2022)



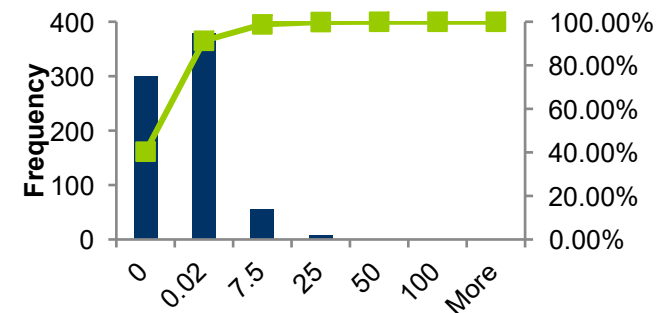
Price	Frequency	Cumulative %
0	482	64.78%
0.02	193	90.73%
7.5	35	95.43%
25	8	96.51%
50	9	97.72%
100	16	99.87%
More	1	100.00%

SRMCP (Dec, 2022)



Bin	Frequency	Cumulative %
0	300	40.32%
0.02	379	91.26%
7.5	56	98.79%
25	8	99.87%
50	1	100.00%
100	0	100.00%
More	0	100.00%

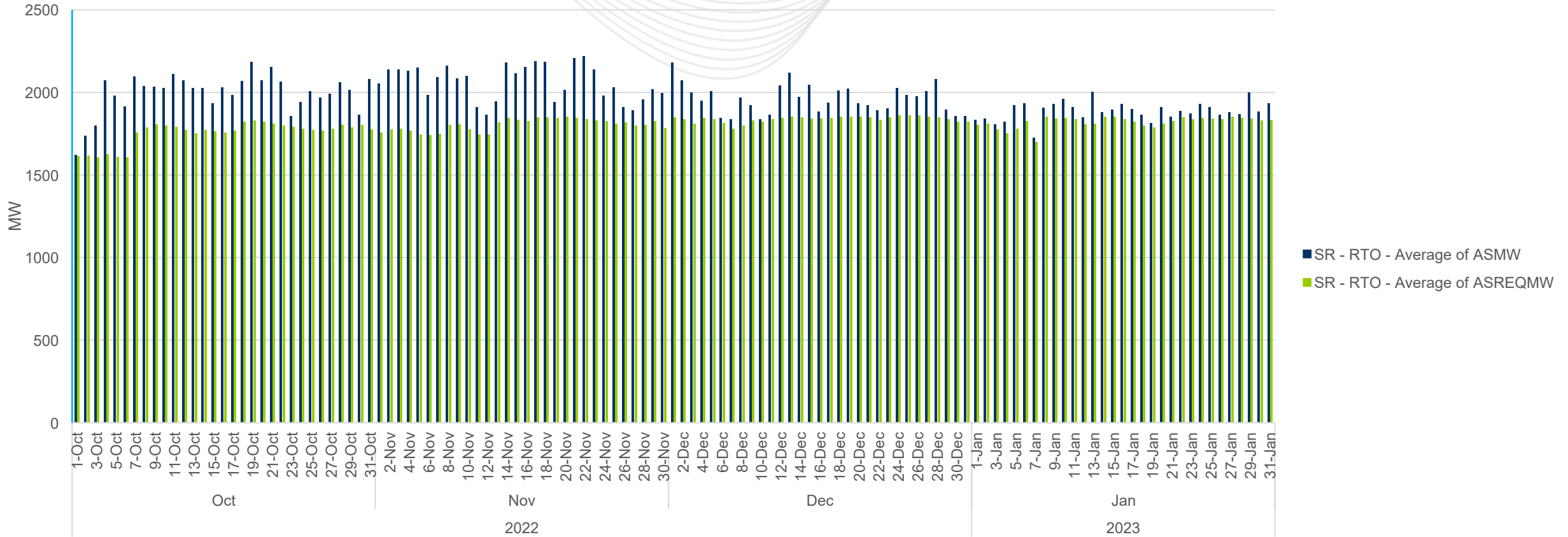
SRMCP (Jan, 2023)

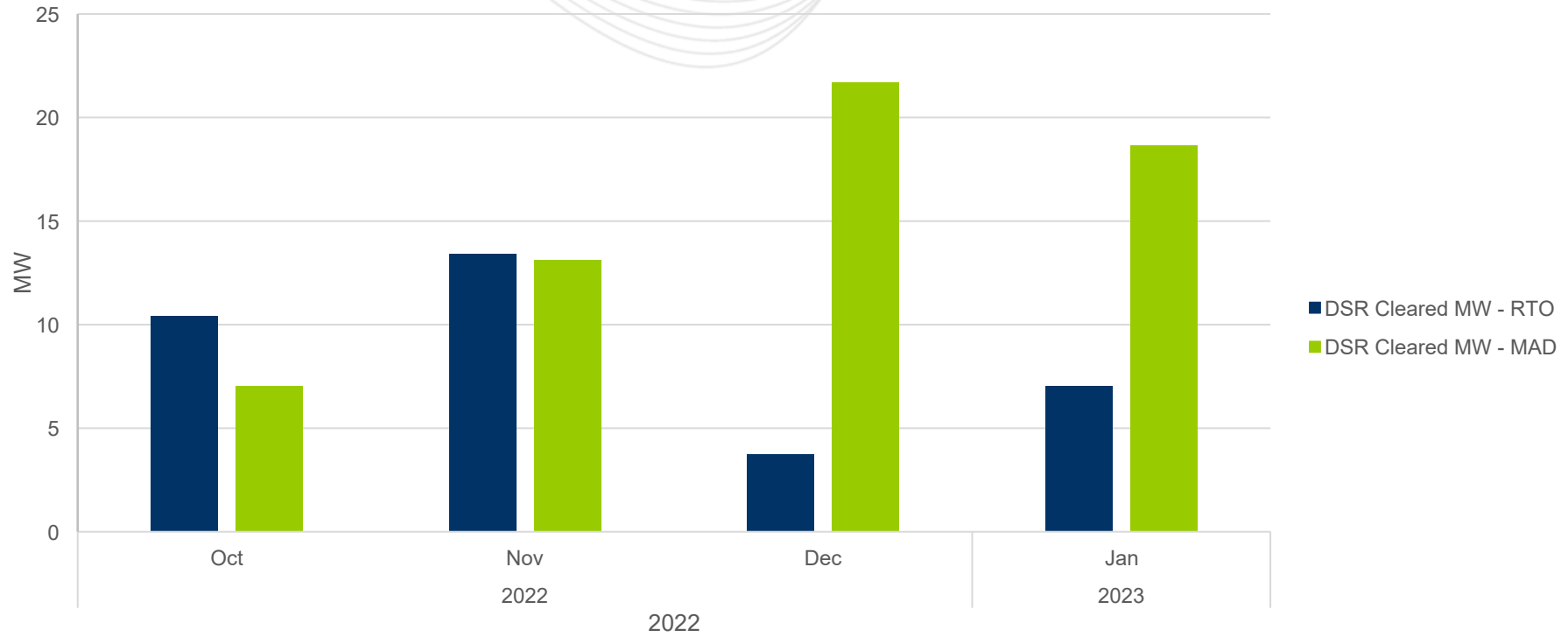


Key Takeaway: SRMCPs were less or equal to \$0.02/MWh most of the time.



AS Requirement (RTO SR) vs. ASMW

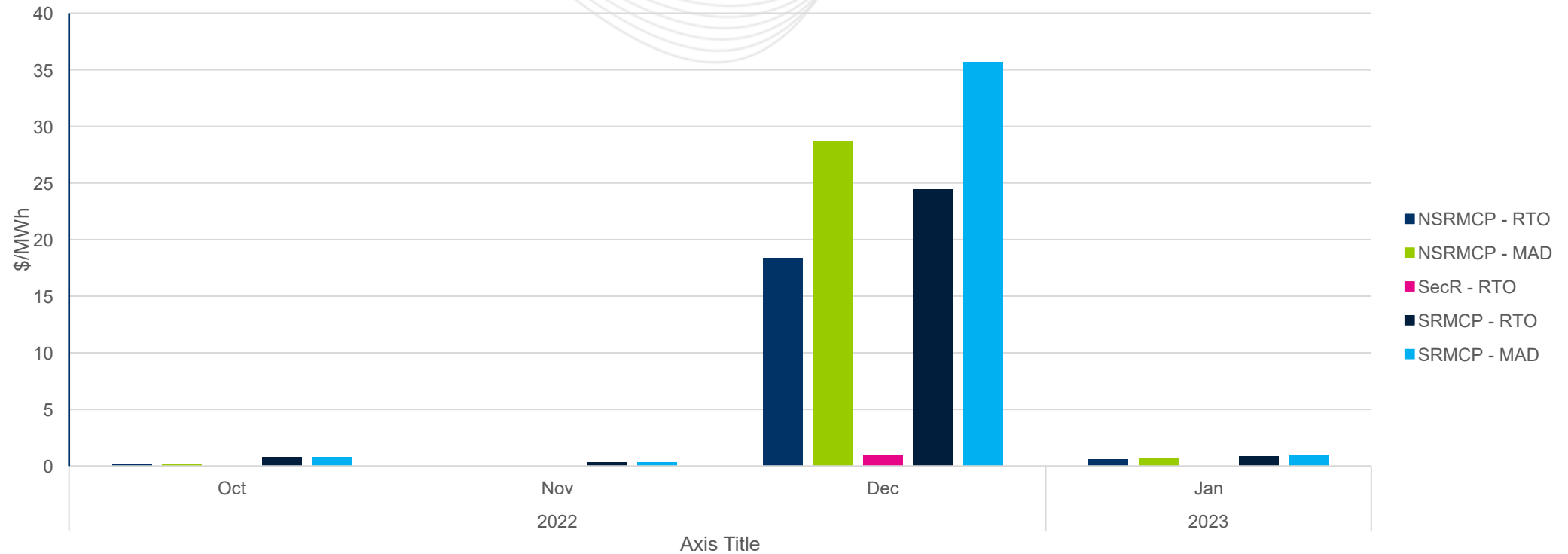




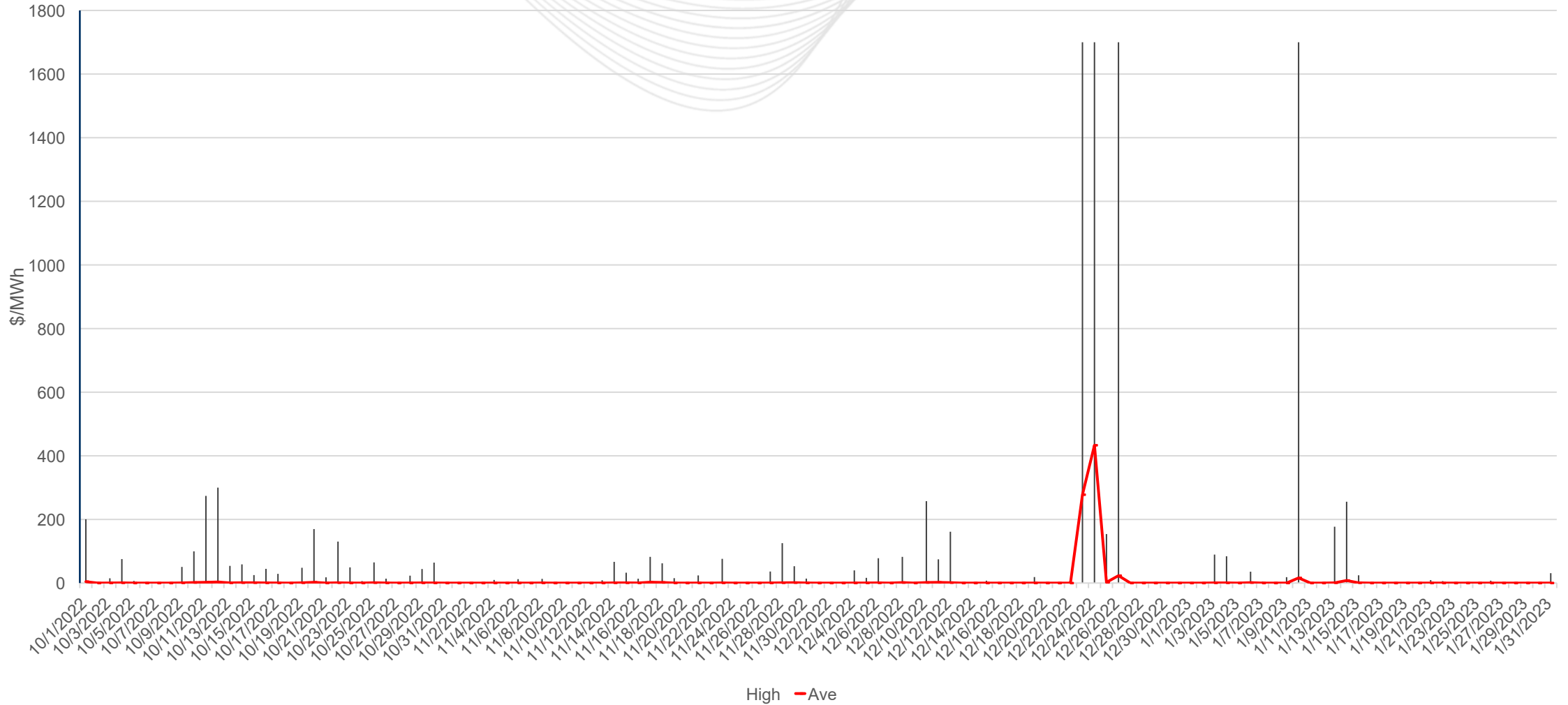


Real-Time Market Metrics

October, 2022 – January, 2023



SRMCP (Daily Max vs. Average)

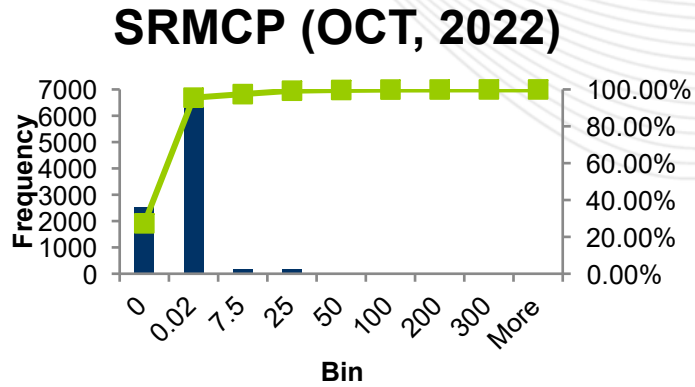


High - Ave

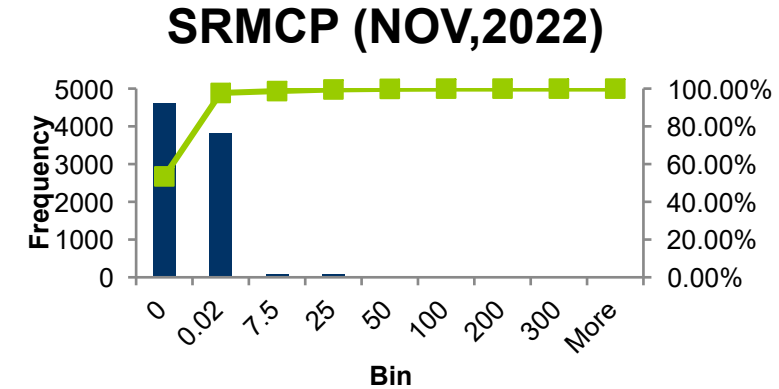


SRMCP Distribution & Histogram: Oct, 2022 – Jan, 2023

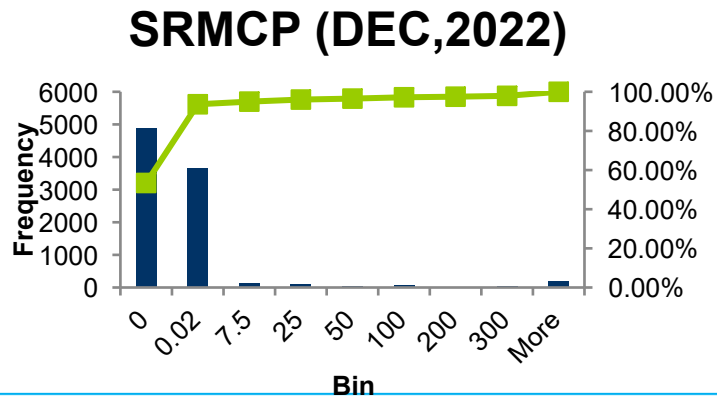
Price	Frequency	Cumulative %
0	2542	27.36%
0.02	6335	95.53%
7.5	179	97.46%
25	172	99.31%
50	37	99.71%
100	20	99.92%
200	4	99.97%
300	3	100.00%
More	0	100.00%



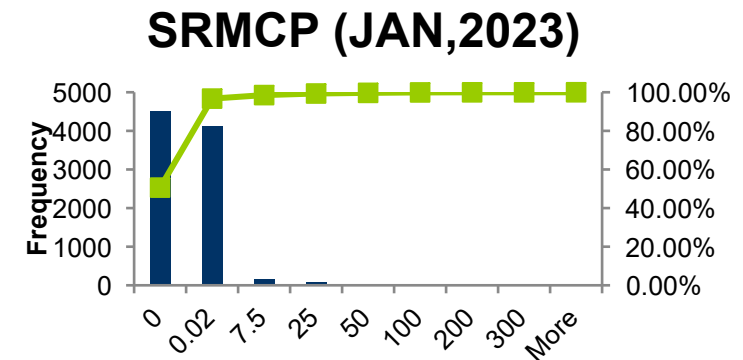
Price	Frequency	Cumulative %
0	4620	53.47%
0.02	3821	97.70%
7.5	86	98.69%
25	74	99.55%
50	27	99.86%
100	12	100.00%
200	0	100.00%
300	0	100.00%
More	0	100.00%



Price	Frequency	Cumulative %
0	4881	53.41%
0.02	3676	93.63%
7.5	123	94.98%
25	96	96.03%
50	45	96.52%
100	62	97.20%
200	27	97.49%
300	40	97.93%
More	189	100.00%

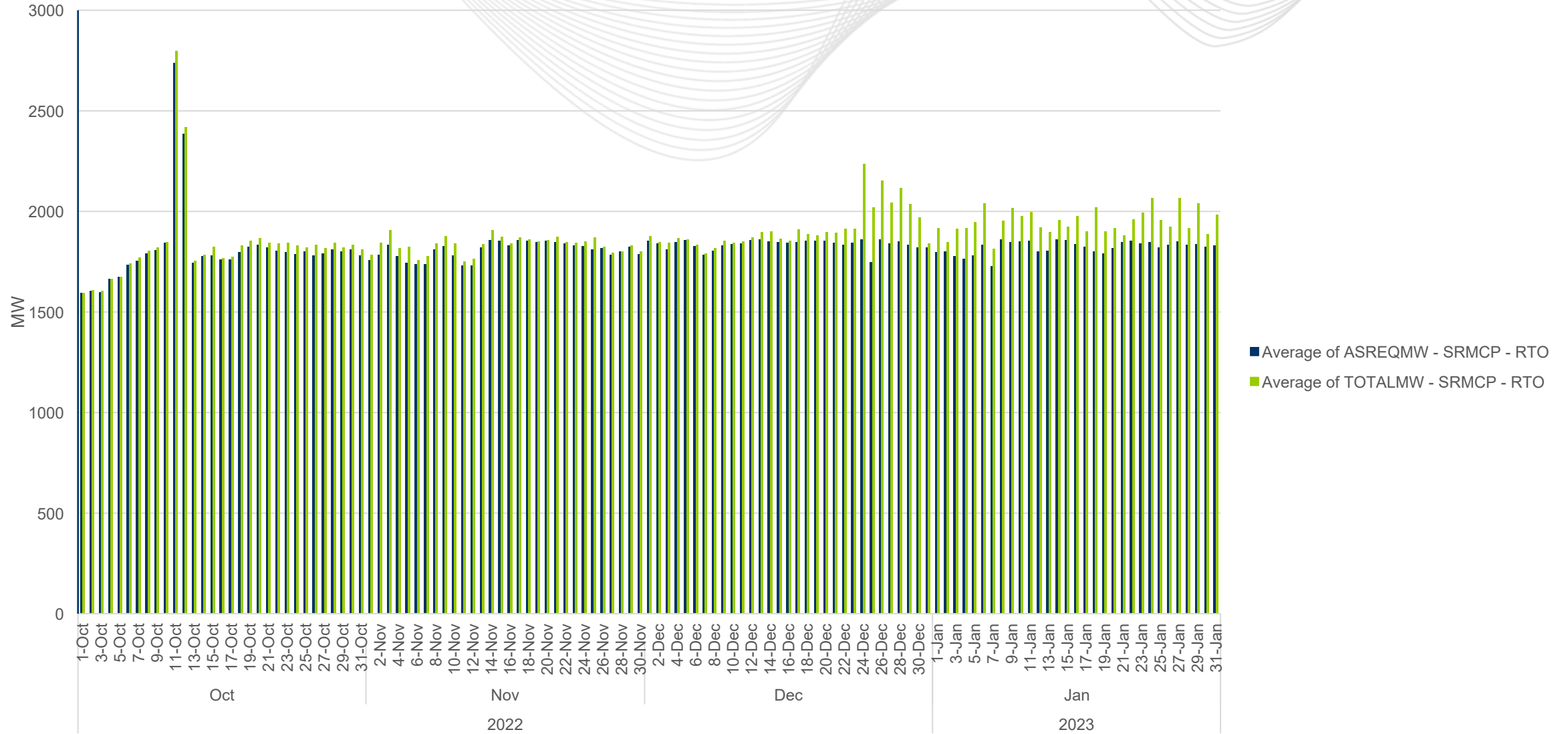


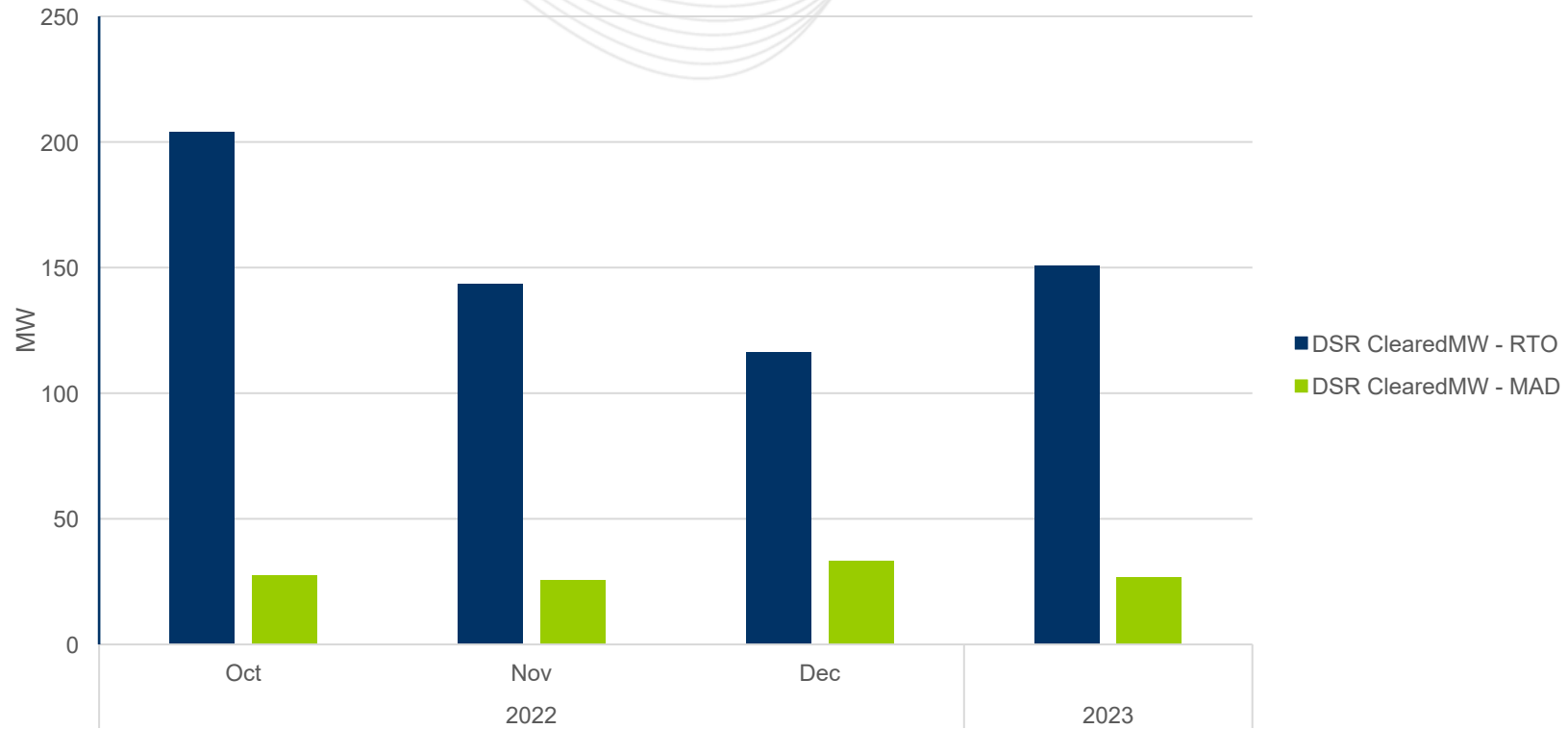
Price	Frequency	Cumulative %
0	4518	50.60%
0.02	4116	96.71%
7.5	163	98.53%
25	73	99.35%
50	30	99.69%
100	20	99.91%
200	5	99.97%
300	0	99.97%
More	3	100.00%



Key Takeaway: SRMCPs were less or equal to \$0.02/MWh most of the time after RPF.

AS Requirement (RTO SR) vs. ASMW





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Reserve Price Formation Update



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