

Fast Start Metrics Update

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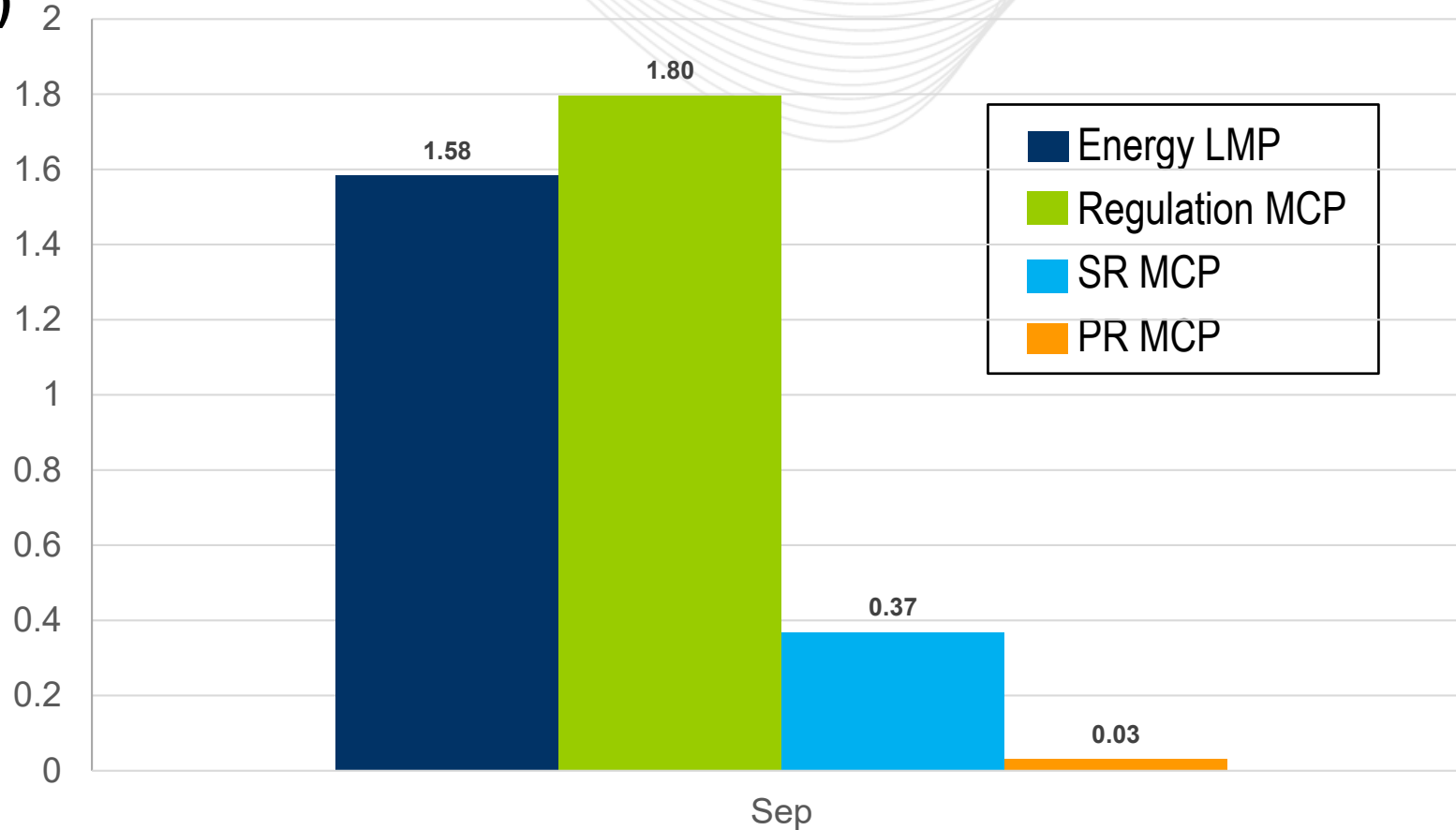
October 6, 2021

- PJM launched Fast Start Pricing on September 1, 2021
- PJM will post Fast Start metrics information monthly
- Uplift summary will be posted in November's update and will include September and October data
- The average energy price increase was \$1.58/MWh, which is a 3.4 percent increase for September
 - Production data reflecting Fast Start Pricing implementation



Fast-Start Pricing: September 2021

Average Increase
(\$/MWh)

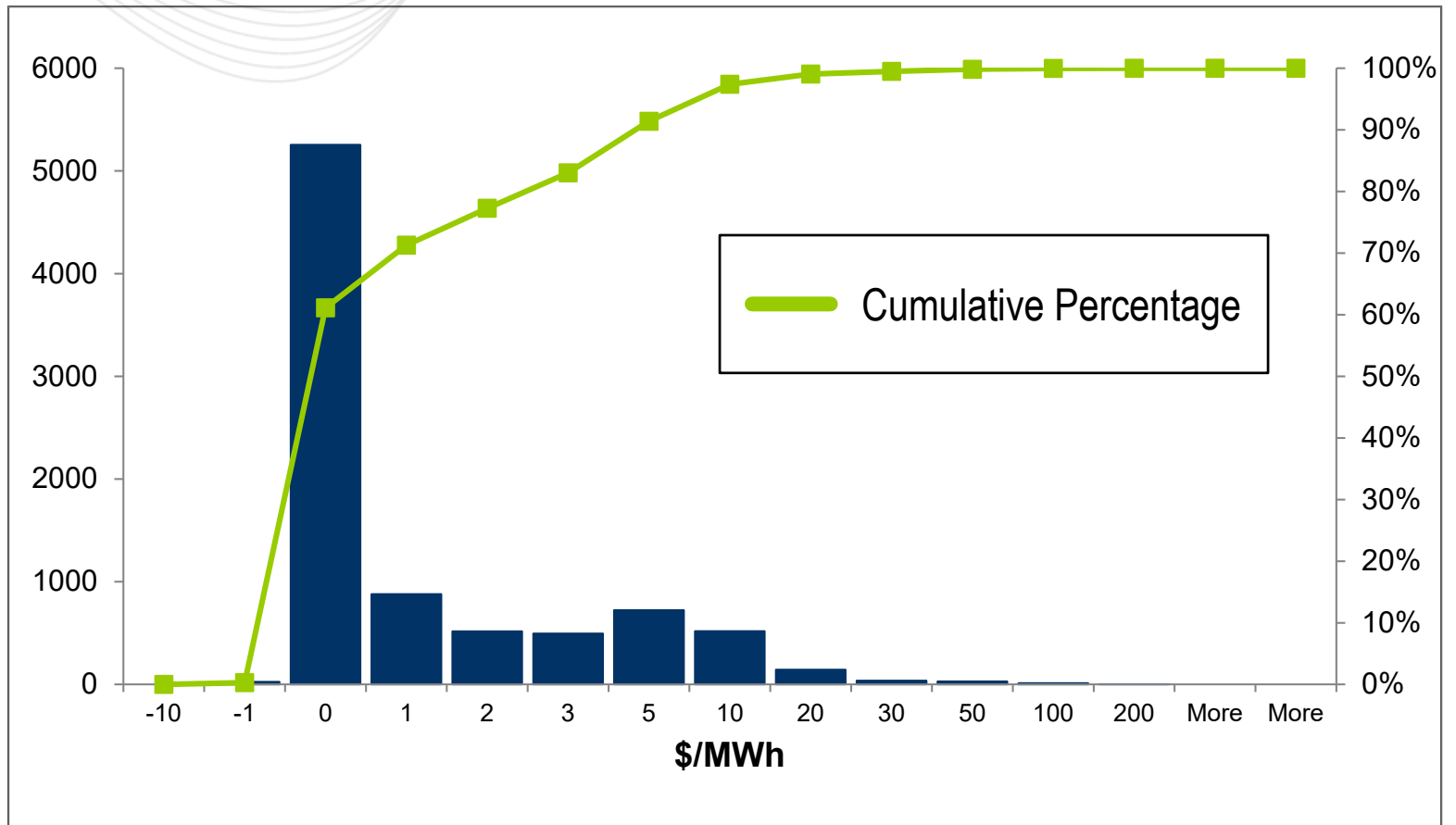


Key Takeaway: Energy and Ancillary Service Market clearing prices all increased due to co-optimization.

Fast-Start Energy LMP Increase (Histogram): September 2021

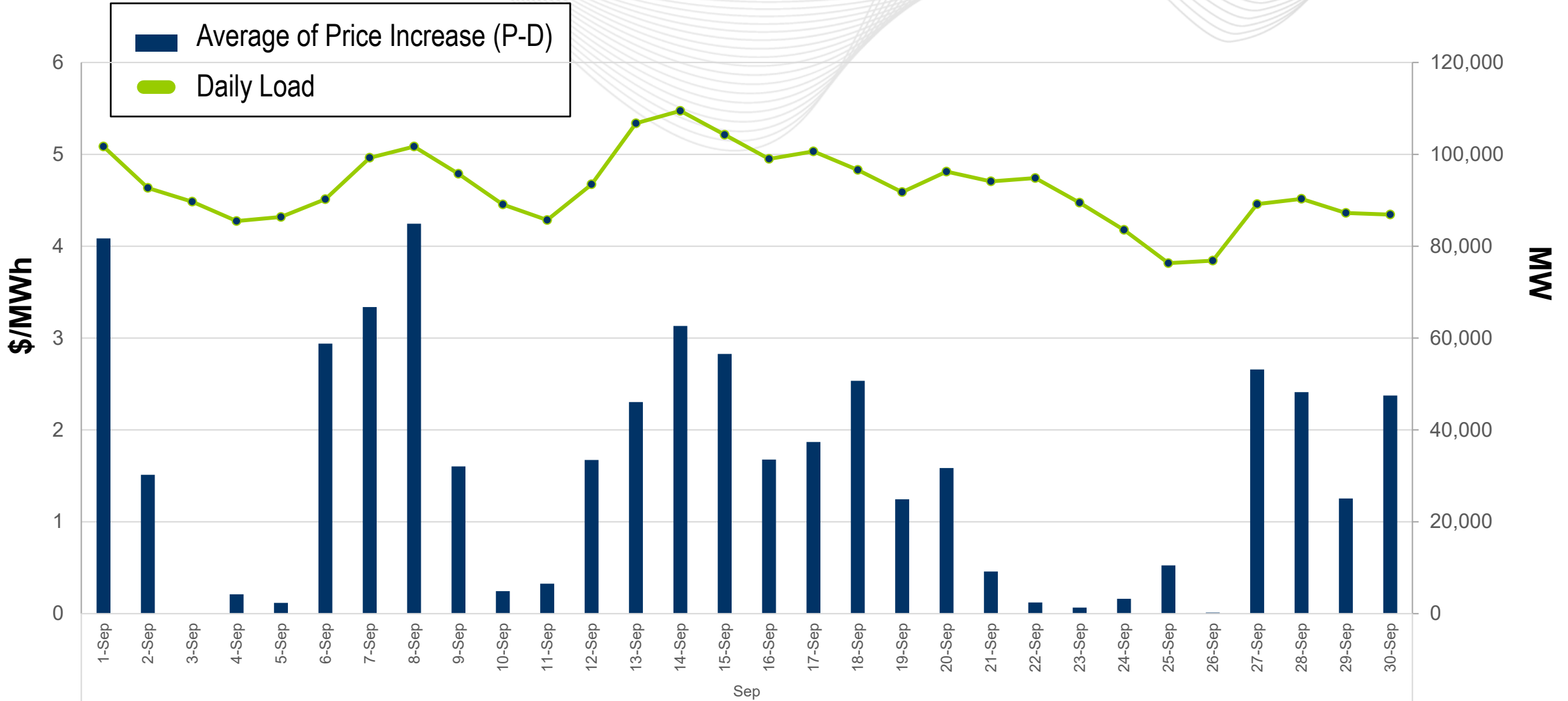
Energy LMP Increase	Frequency	Cumulative
-10	3	0.03%
-1	22	0.29%
0	5256	61.12%
1	879	71.30%
2	517	77.28%
3	496	83.02%
5	724	91.40%
10	519	97.41%
20	143	99.06%
30	37	99.49%
50	30	99.84%
100	12	99.98%
200	2	100.00%

Frequency
(Number of Intervals)



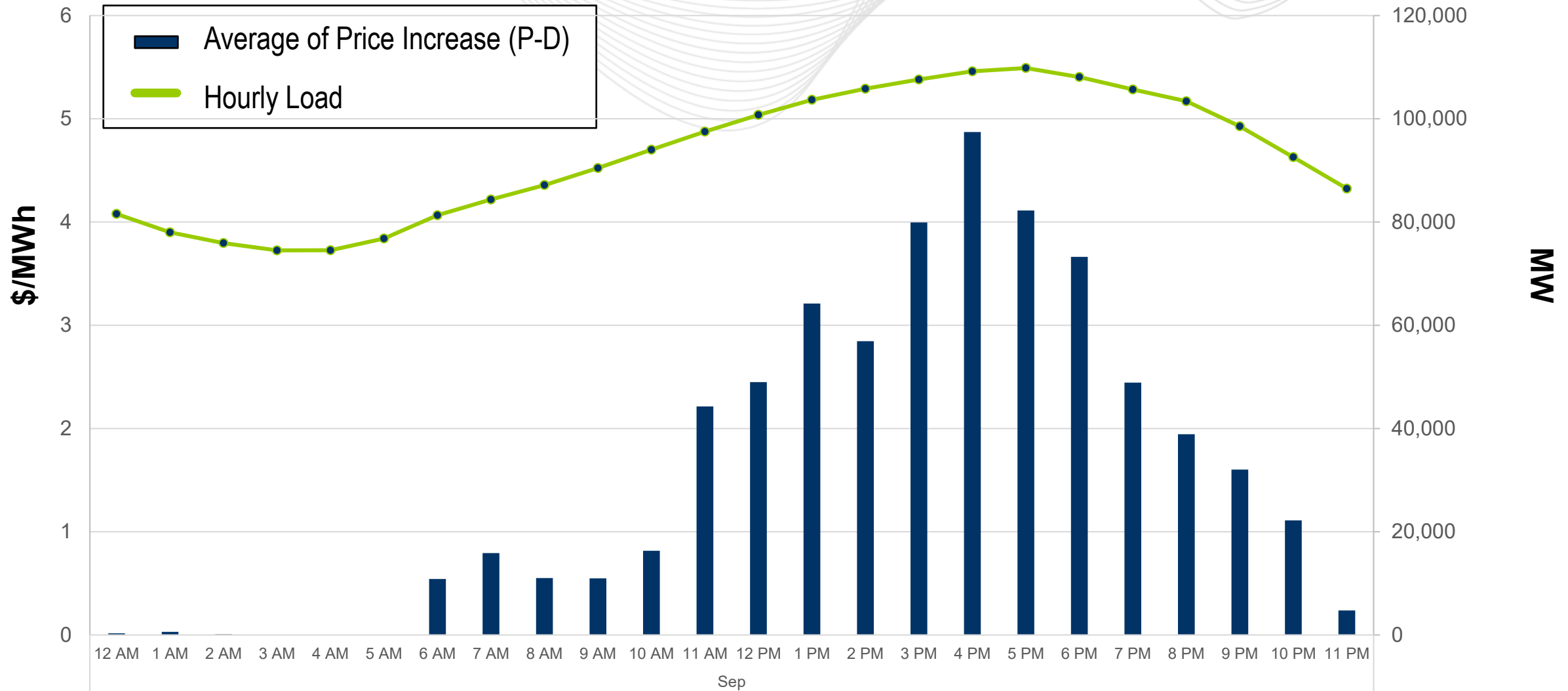
Key Takeaway: Over 50% of the time, there was zero impact on Energy LMPs.

Fast-Start Daily Distribution: September 2021



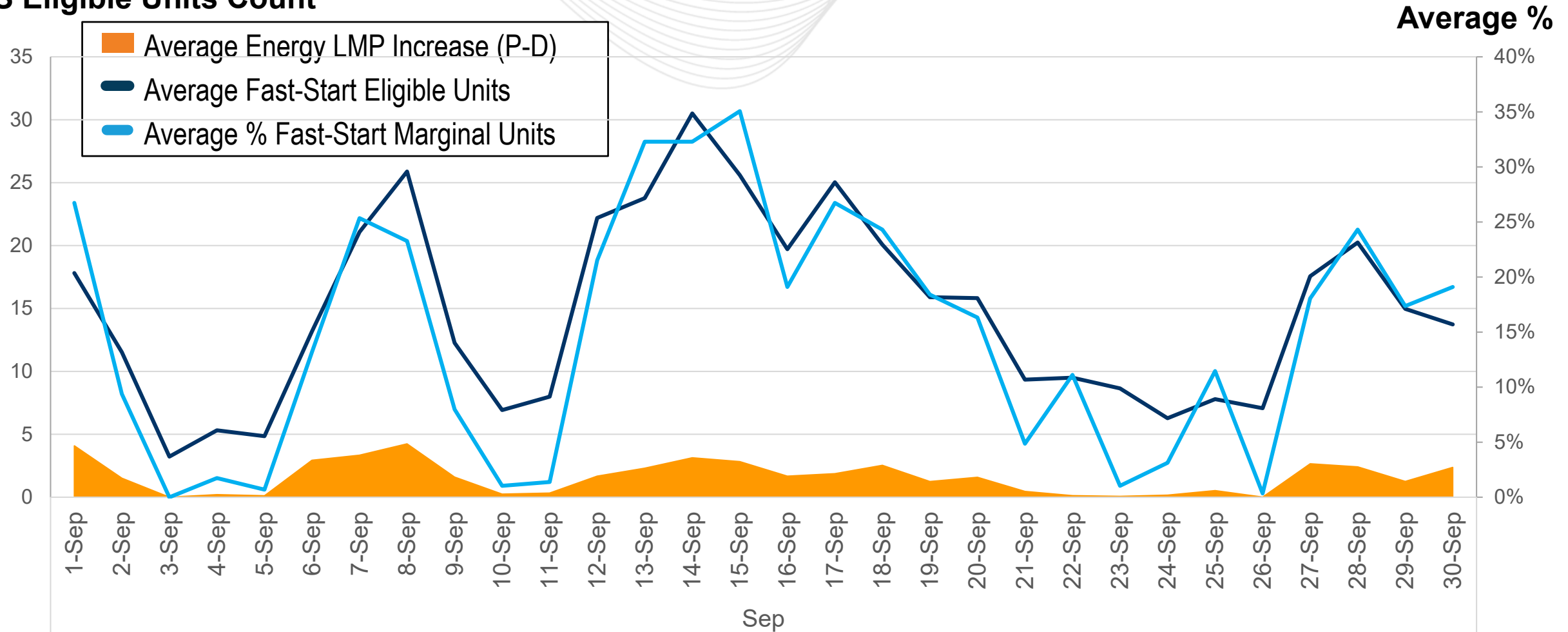
Key Takeaway: LMP increases are more apparent on higher load days.

Fast-Start Hourly Distribution: September 2021



Key Takeaway: Largest impact on LMPs occur during on-peak hours.

FS Eligible Units Count



Key Takeaway: Fast-start units are marginal approximately 15% of time.

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Fast Start Metrics Update



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