Wind Curtailment Statistics

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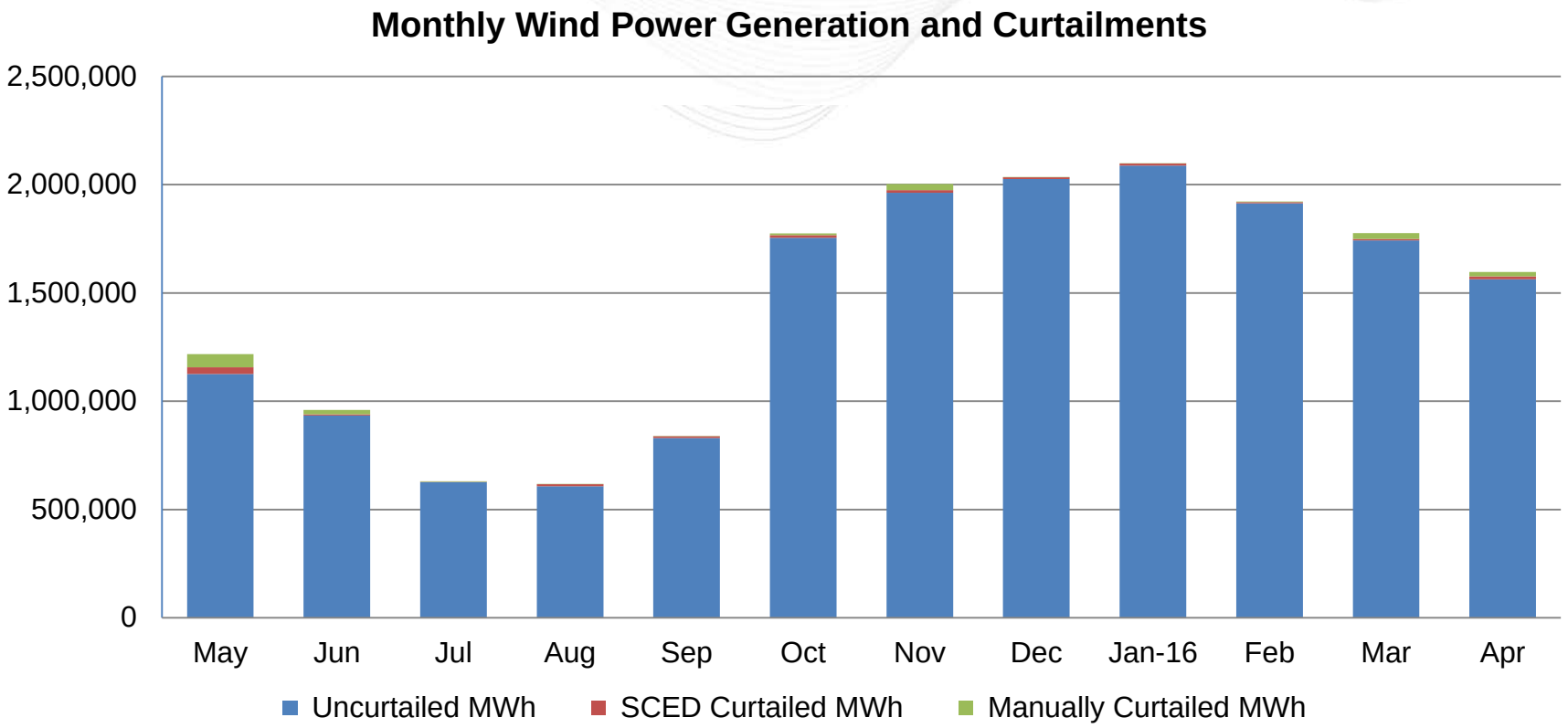
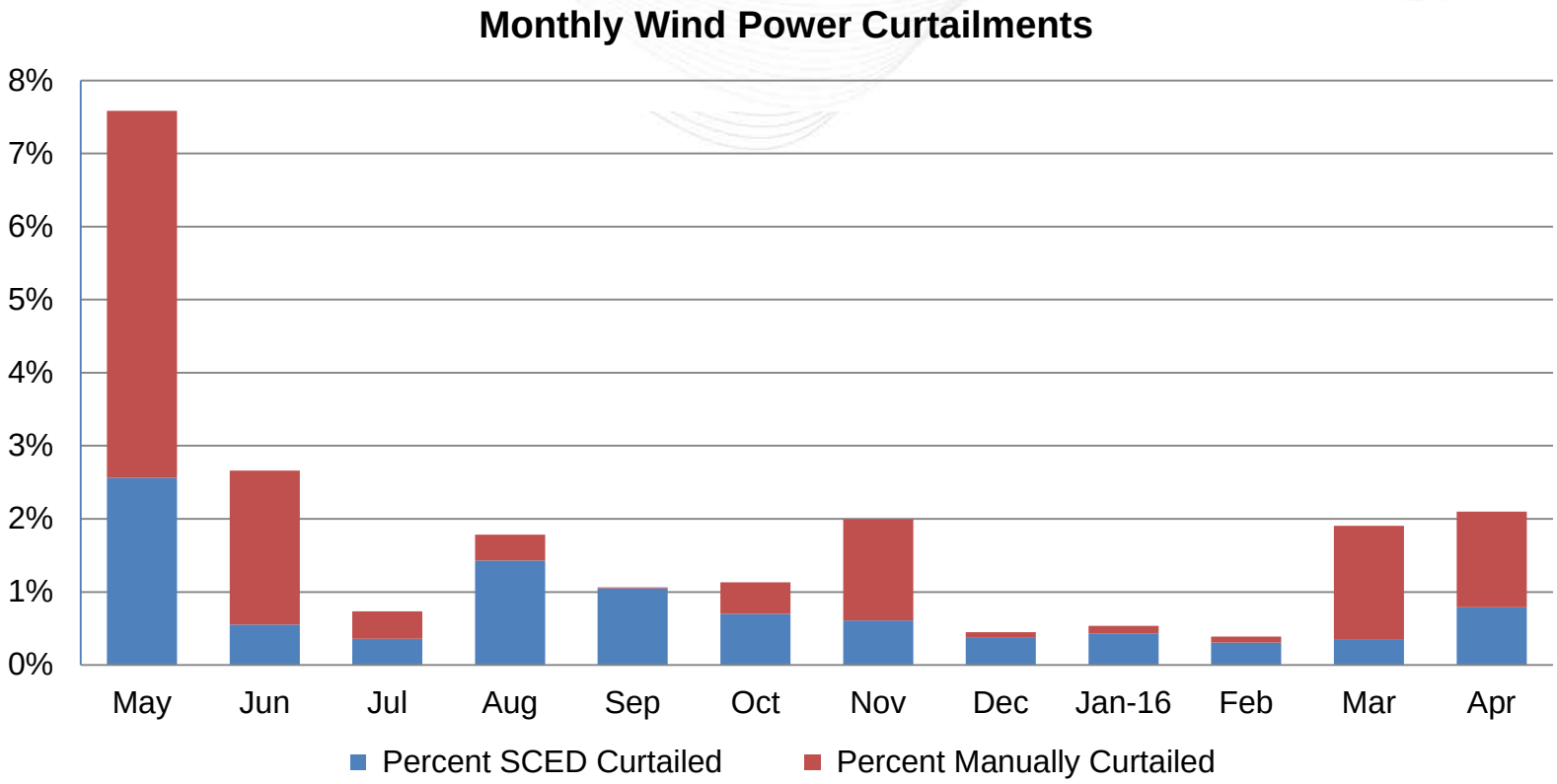
Wind Power Curtailments

Monthly - May 2015 through April 2016



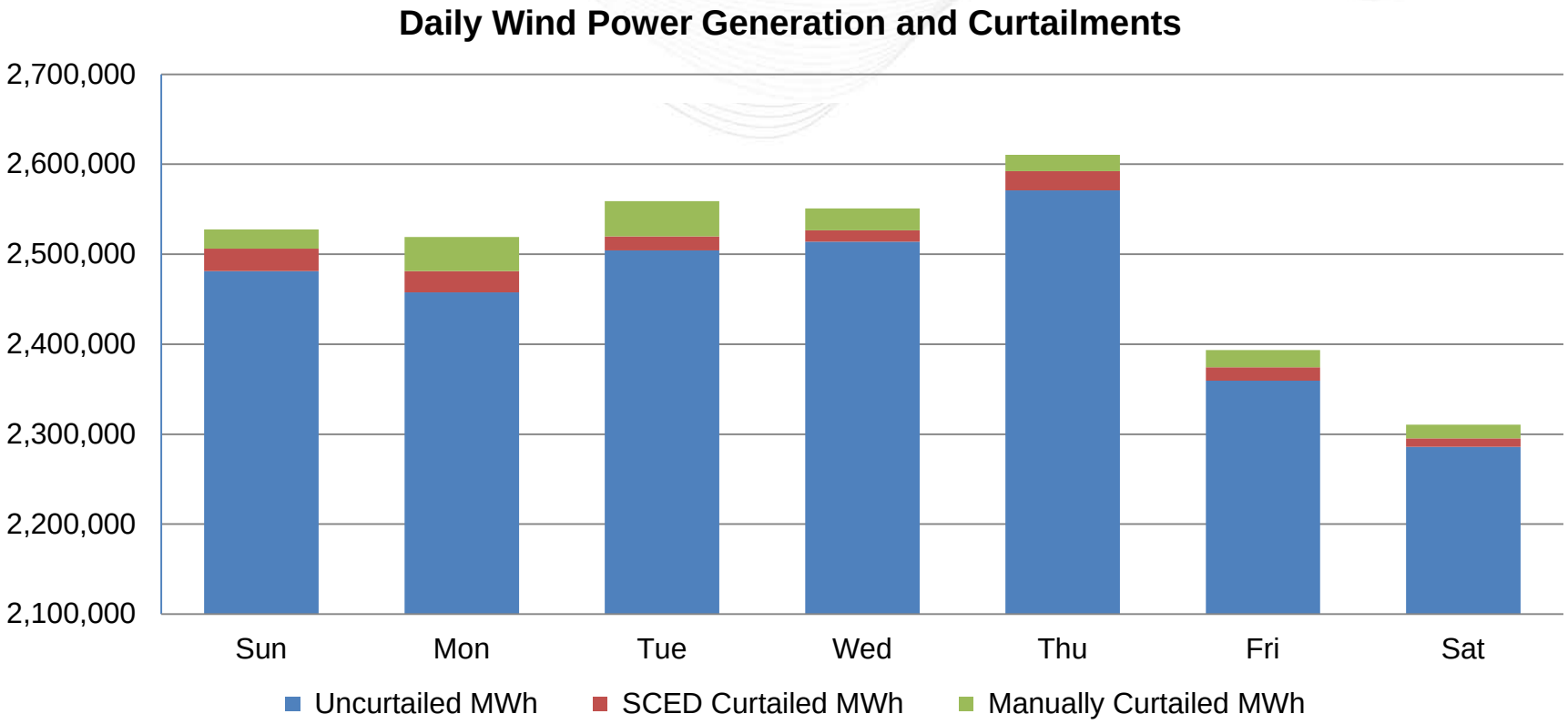
Wind Power Curtailments

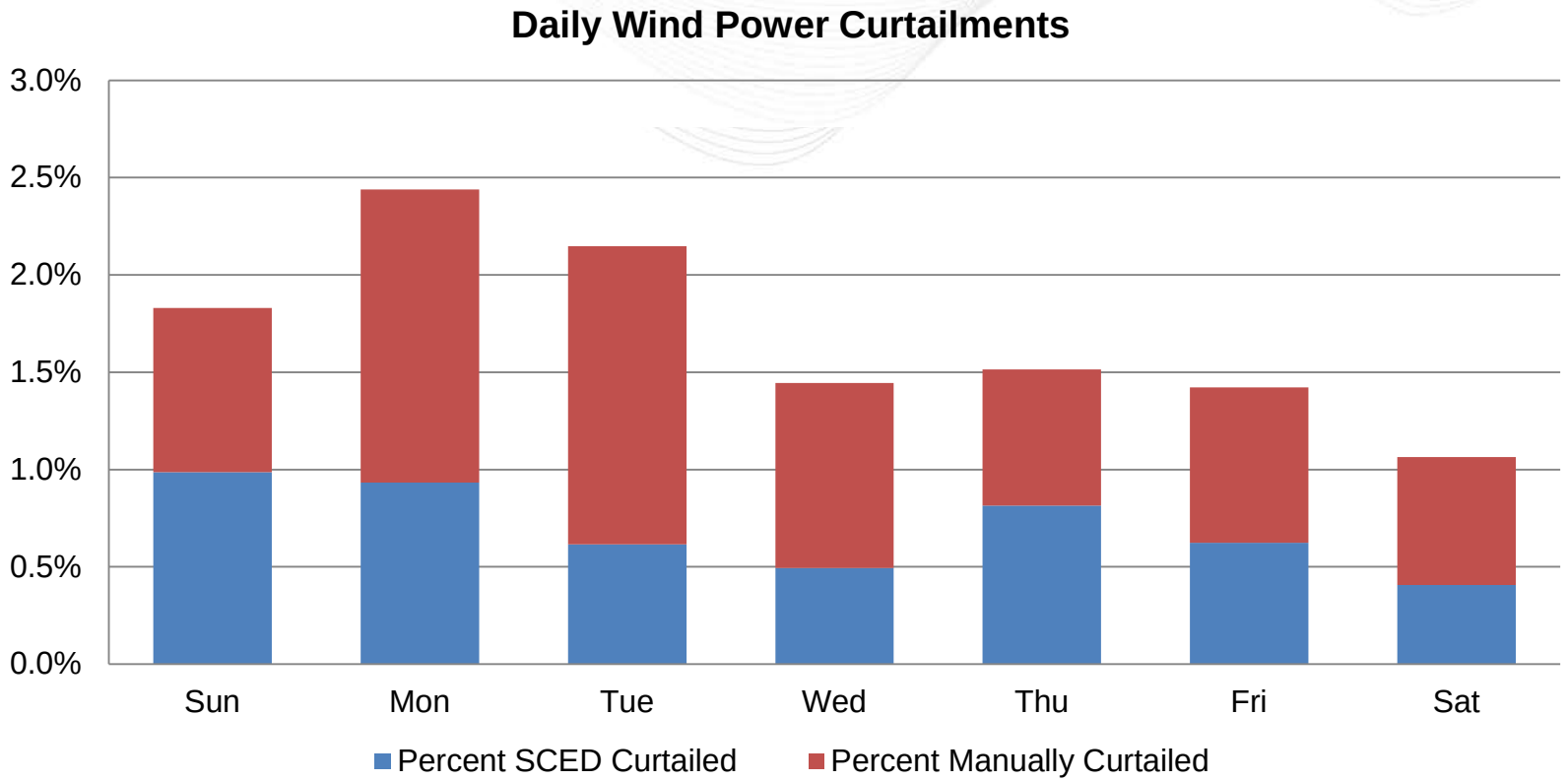
Monthly - May 2015 through April 2016



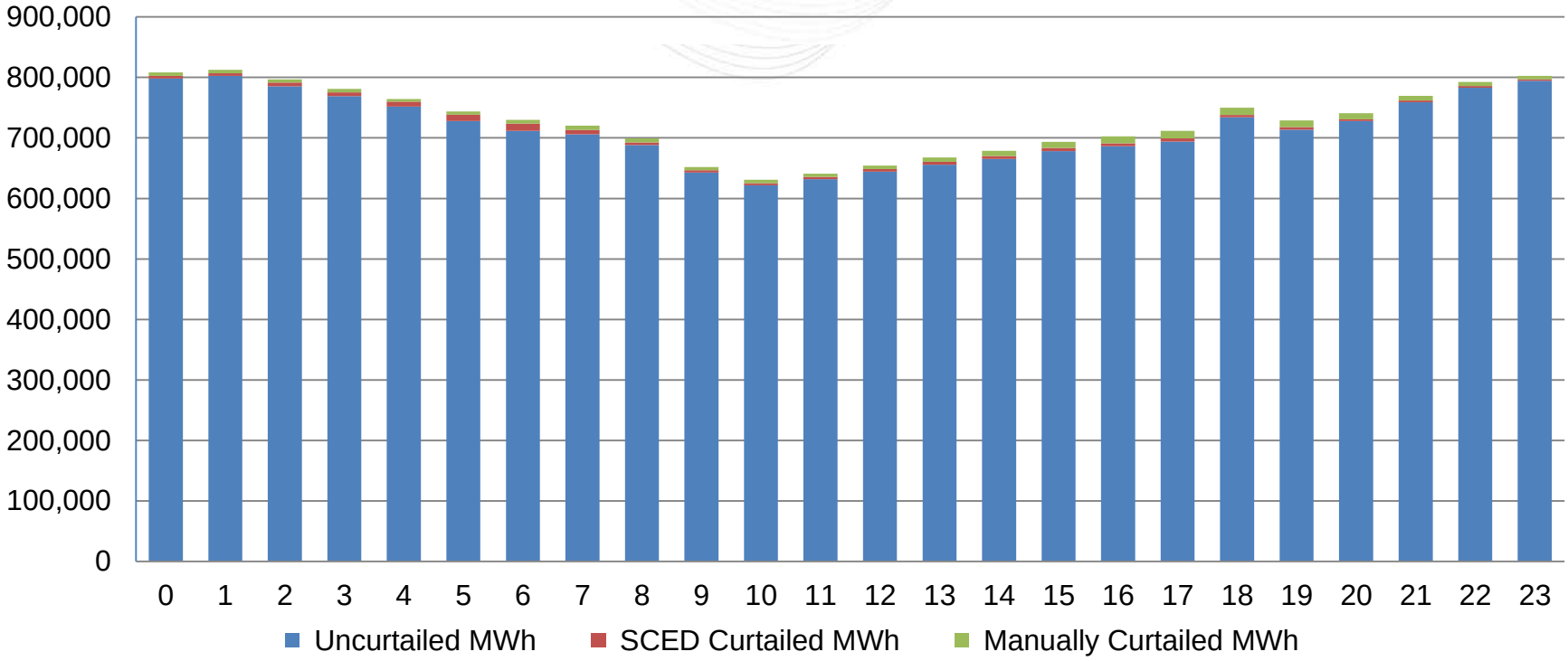
Wind Power Curtailments

Daily - May 2015 through April 2016



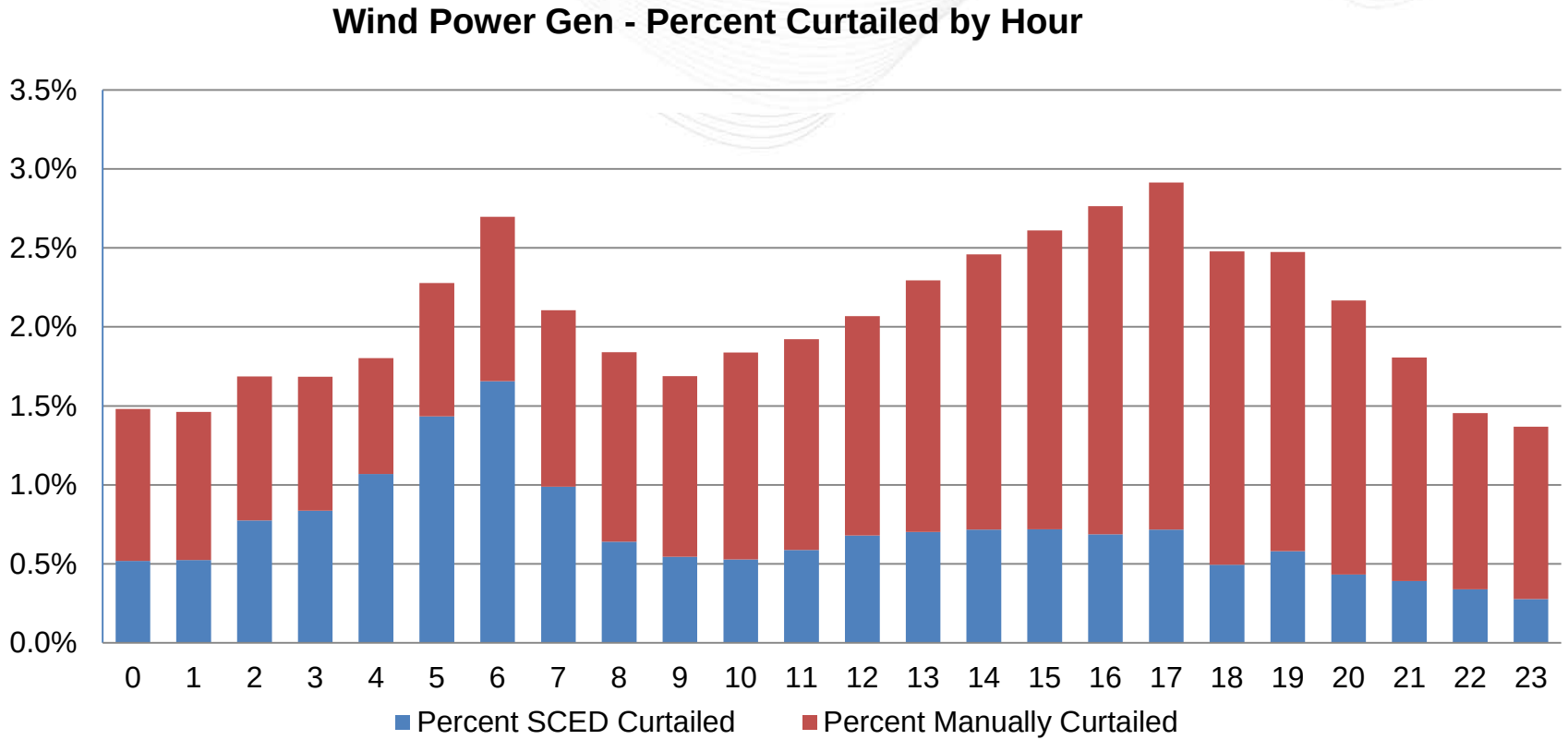

Daily Wind Power Curtailments
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Percent SCED Curtailed
Percent Manually Curtailed

Hourly Wind Power Generation and Curtailments



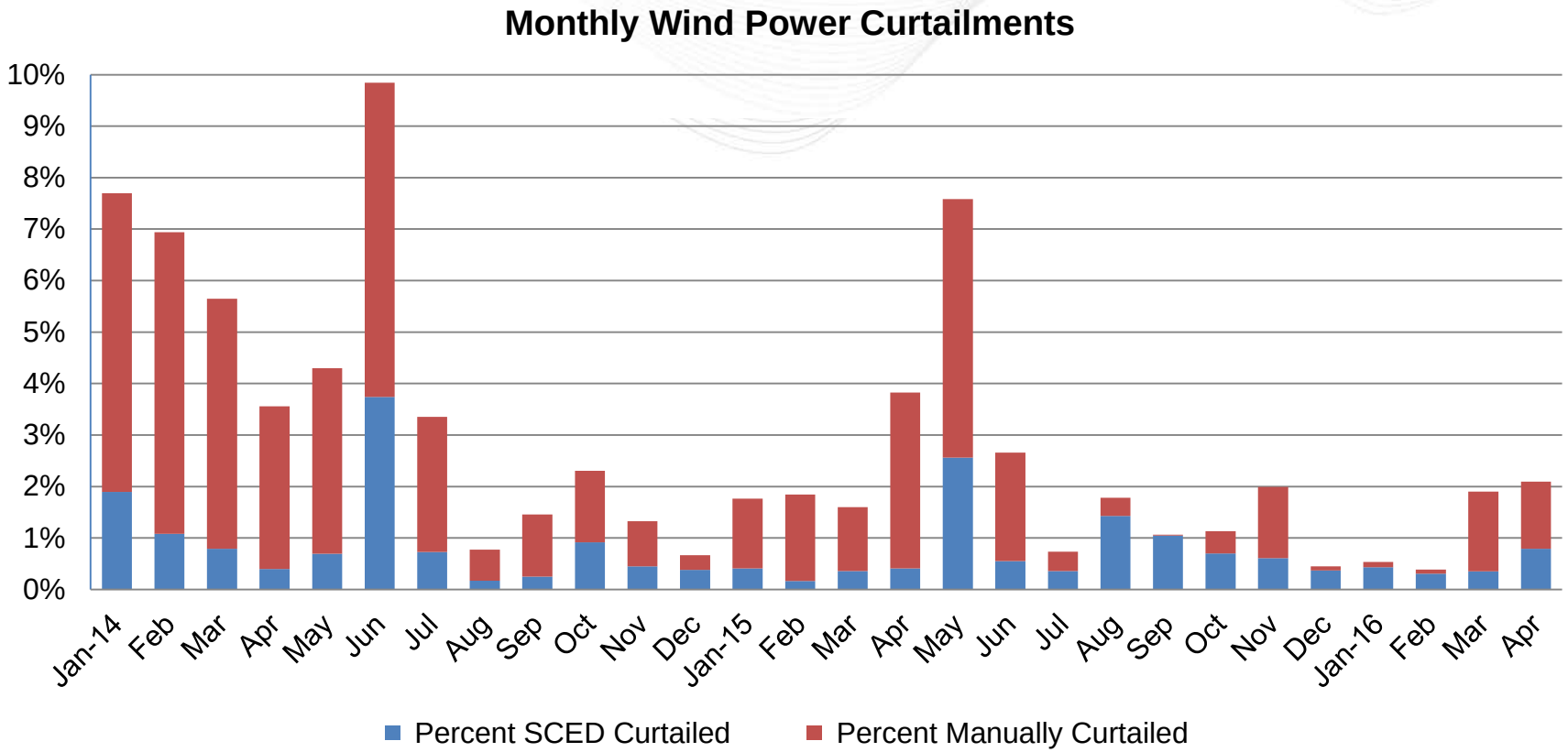
Wind Power Curtailments

Hourly - May 2015 through April 2016



Wind Power Curtailments

Monthly - January 2014 through April 2016



- Wind power curtailments averaged 1.7% for 12-month period ending Apr 2016.
  - SCED Curtailed: 0.70%
  - Manually Curtailed: 1.00%
- Comparing 2014 and 2015, wind generation increased 6.7%, but average wind power curtailments *declined* from 4.1% in 2014 to 2.2% in 2015.
- Four the first four months of 2016, wind power curtailments averaged 1.2%.
- Decreasing curtailments are likely attributable to:
  - Transmission system upgrades
  - Enhanced wind dispatch rules - wind farms following dispatch
  - Improved interregional coordination