

Wind Curtailment Statistics

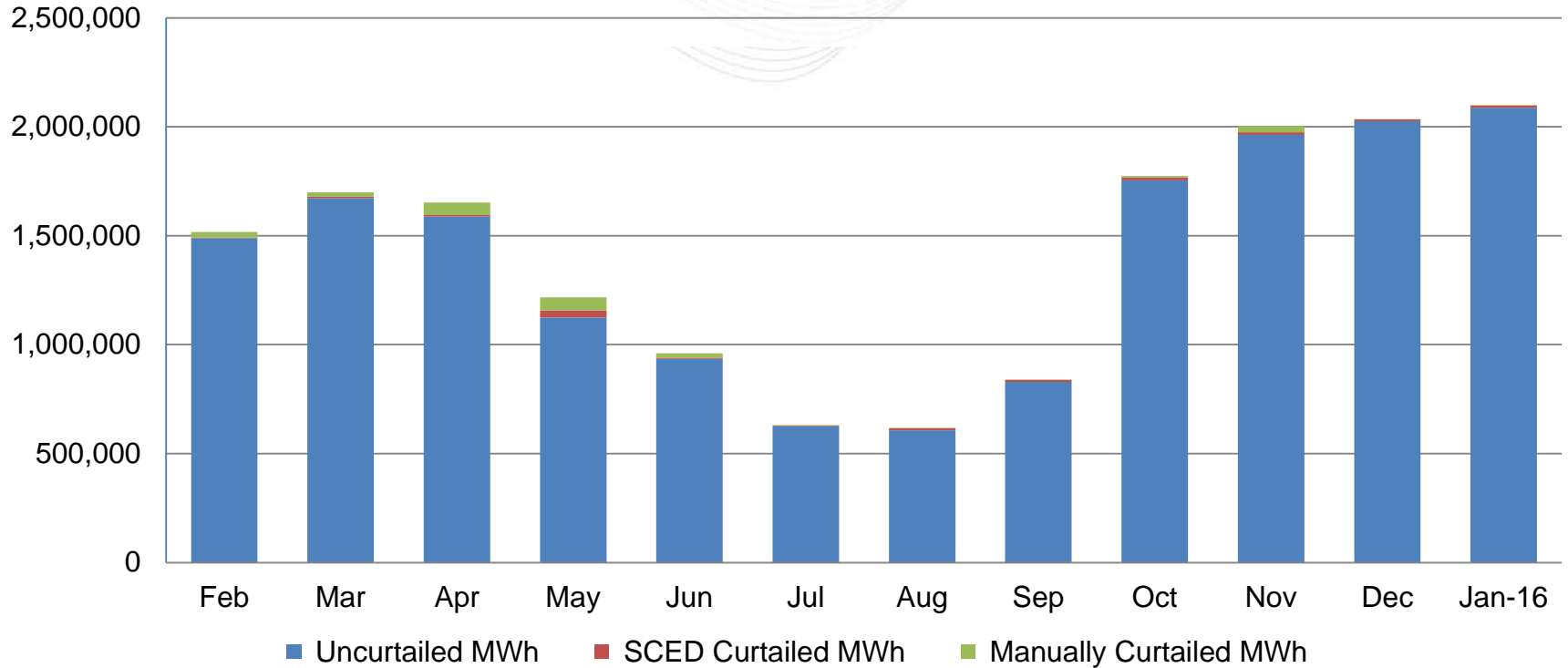
Ken Schuyler

Manager, Renewable Services

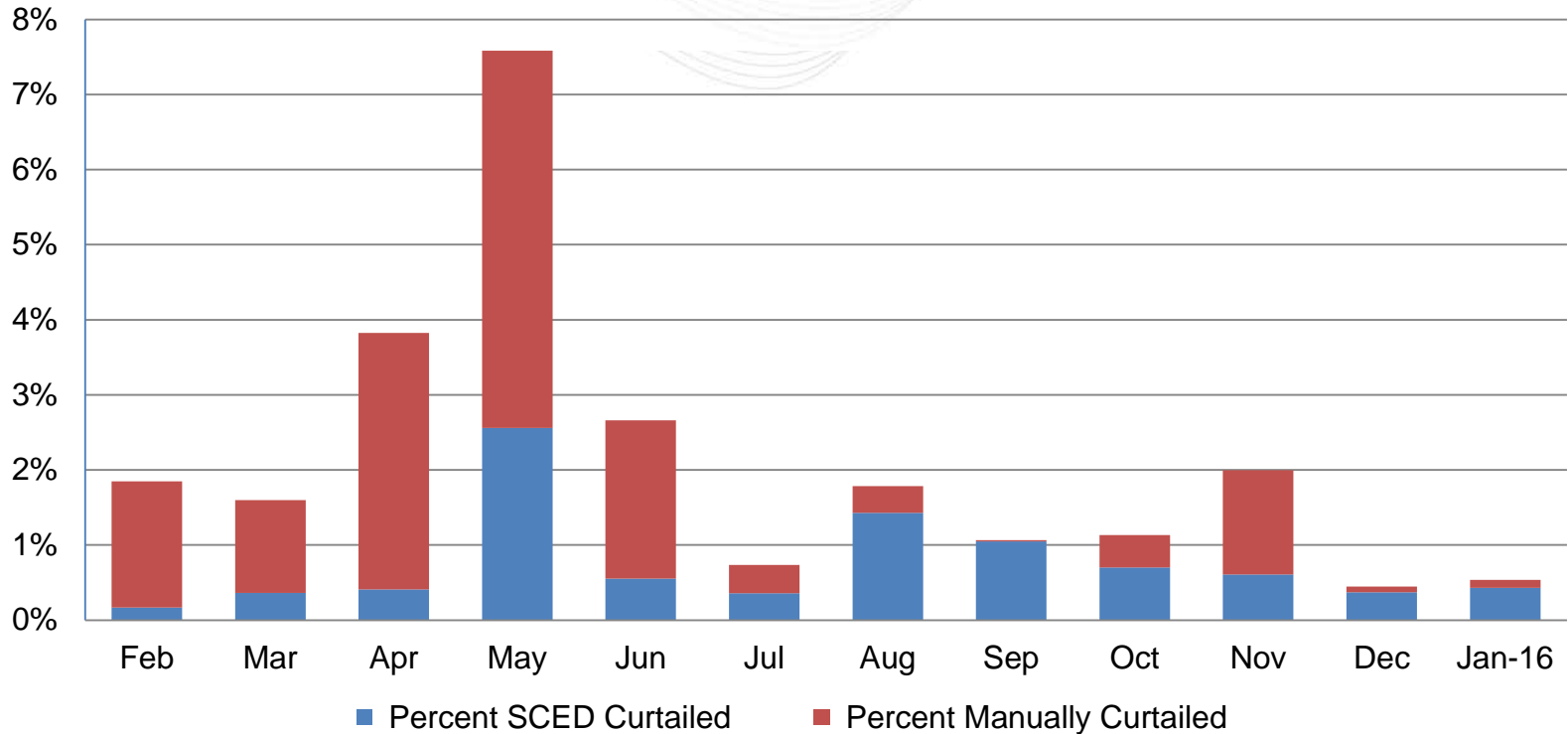
Intermittent Resources Subcommittee

March 7, 2016

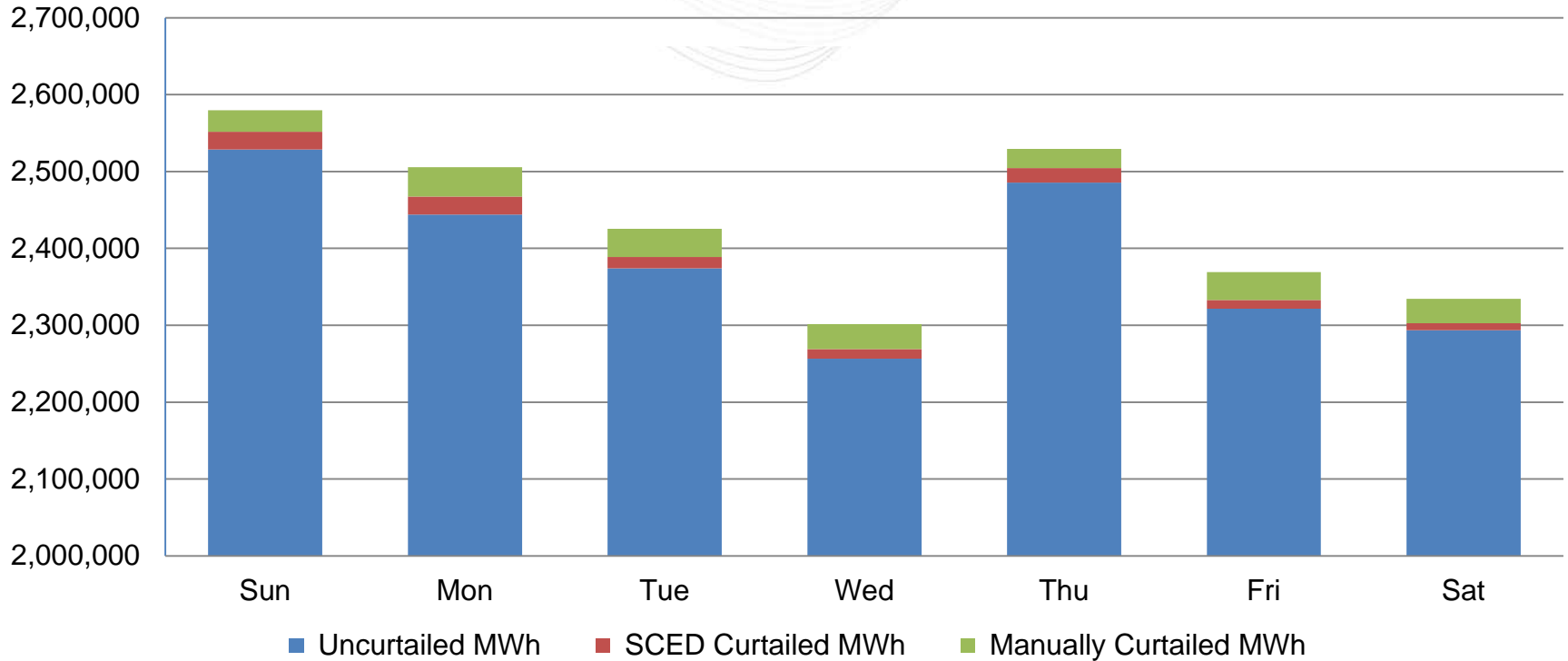
Monthly Wind Power Generation and Curtailments



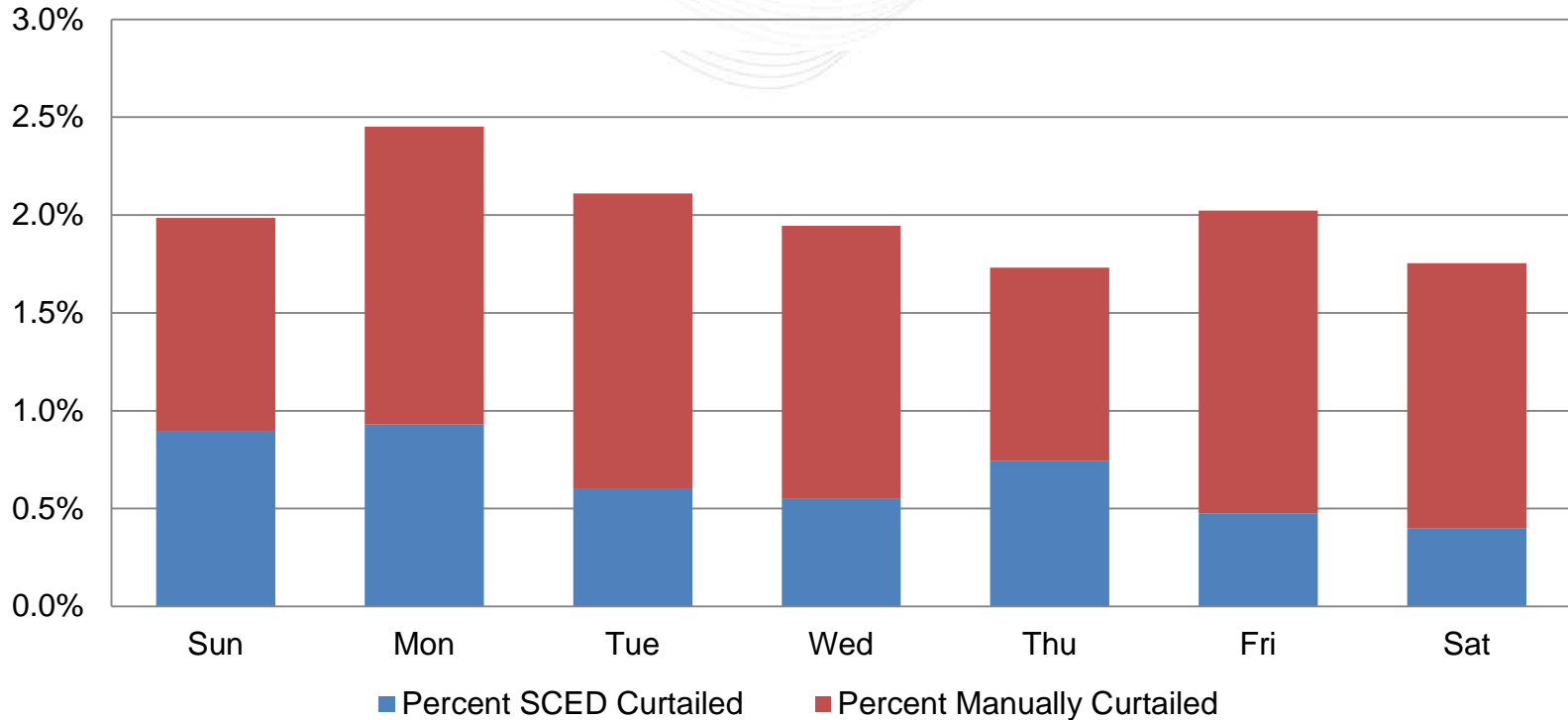
Monthly Wind Power Curtailments



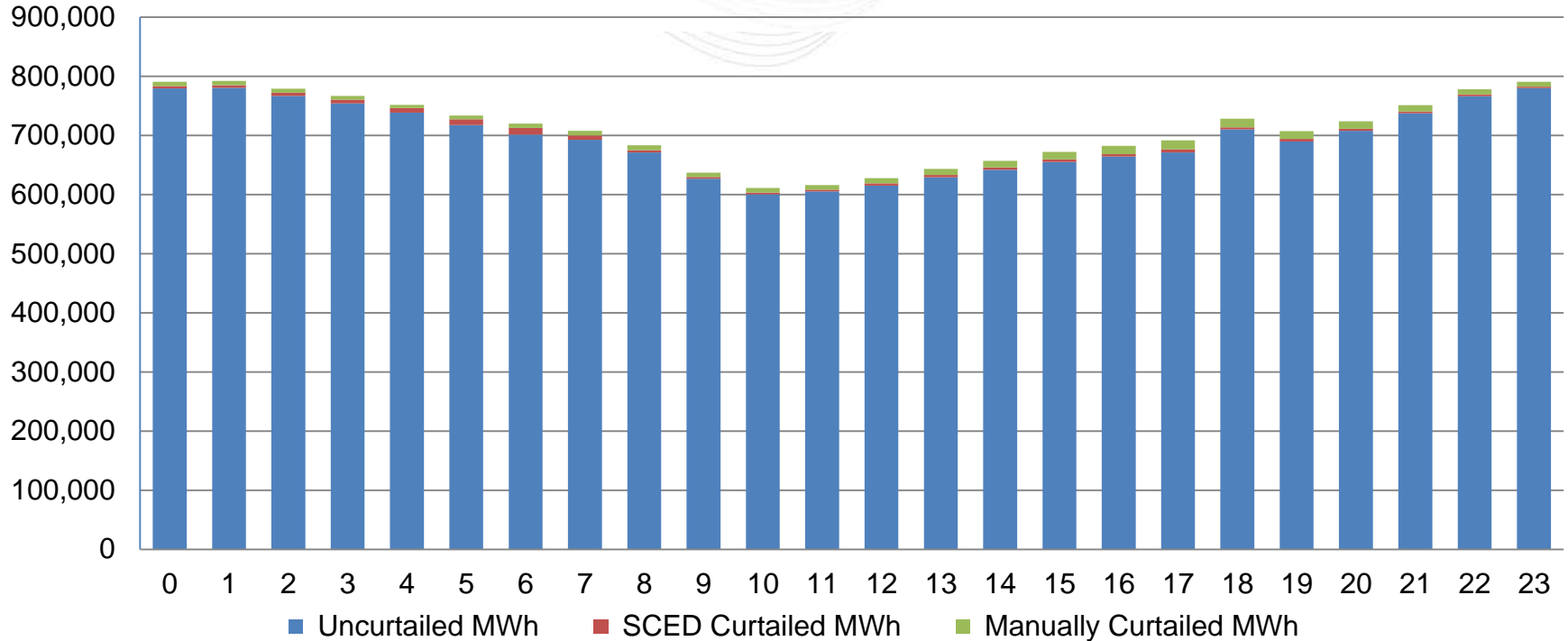
Daily Wind Power Generation and Curtailments



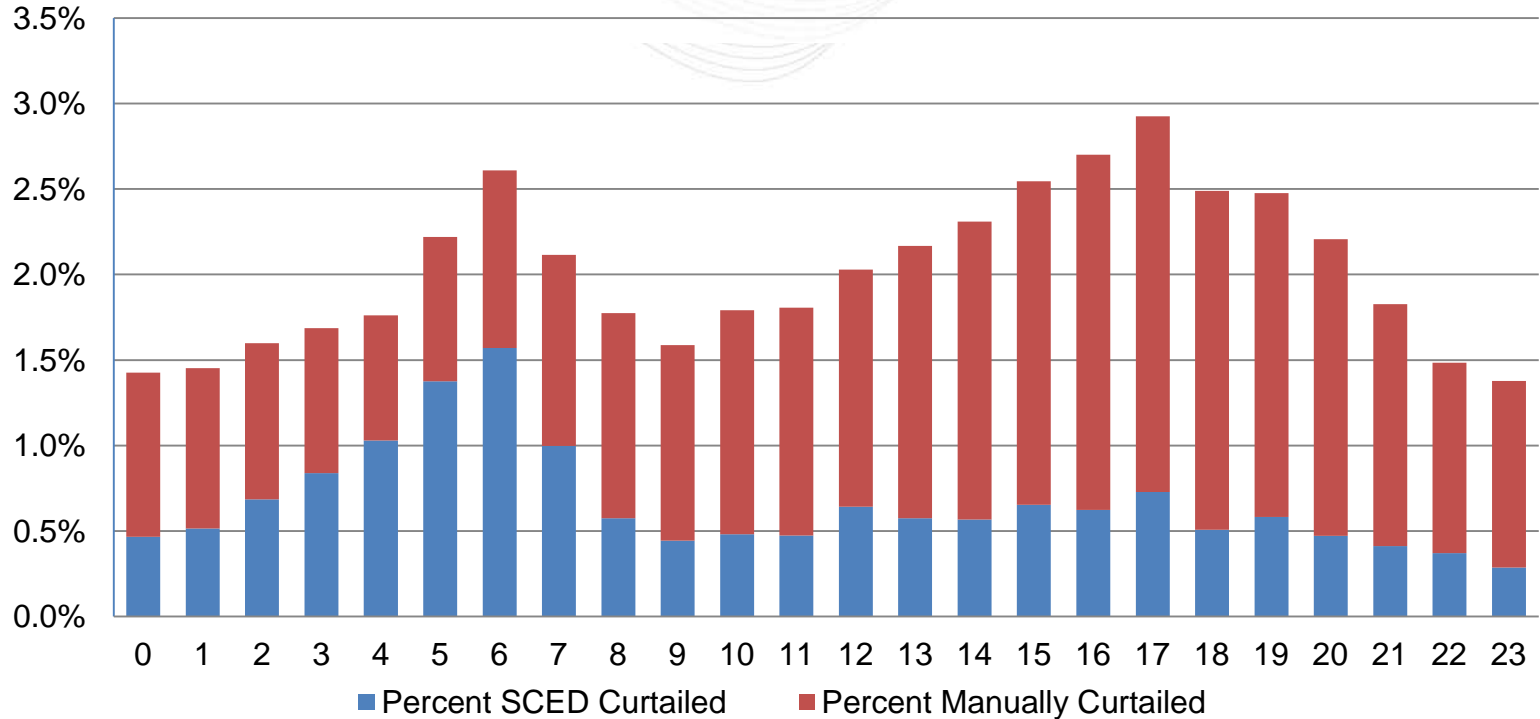
Daily Wind Power Curtailments



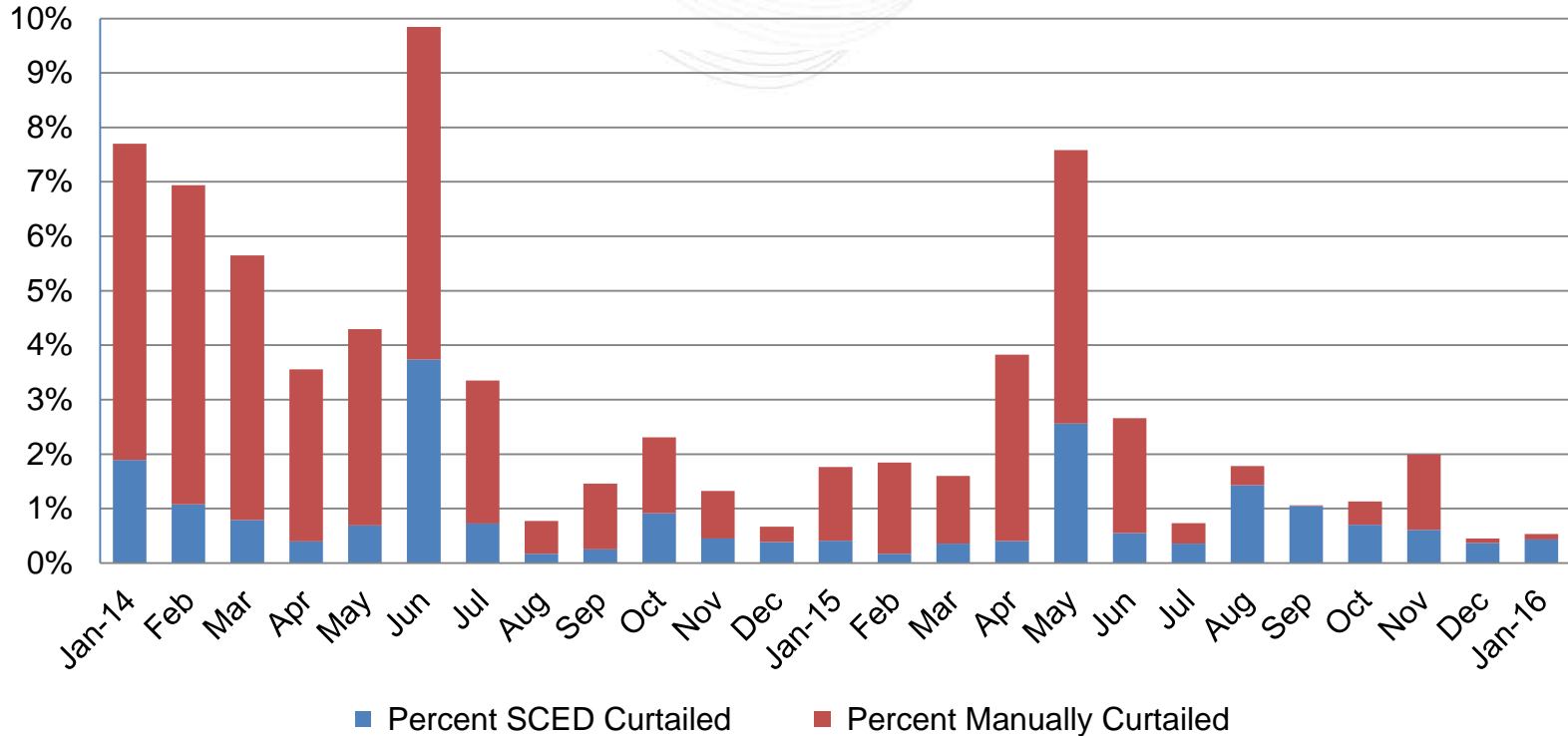
Hourly Wind Power Generation and Curtailments



Wind Power Gen - Percent Curtailed by Hour



Monthly Wind Power Curtailments



- Wind power curtailments averaged **2.0%** for 12-month period ending Jan 2016.
 - SCED Curtailed: 0.66%
 - Manually Curtailed: 1.34%
- 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.
- Decreasing curtailments are likely attributable to:
 - Transmission system upgrades
 - Enhanced wind dispatch rules - wind farms following dispatch
 - Improved interregional coordination