WESTERN ENERGY IMBALANCE MARKET

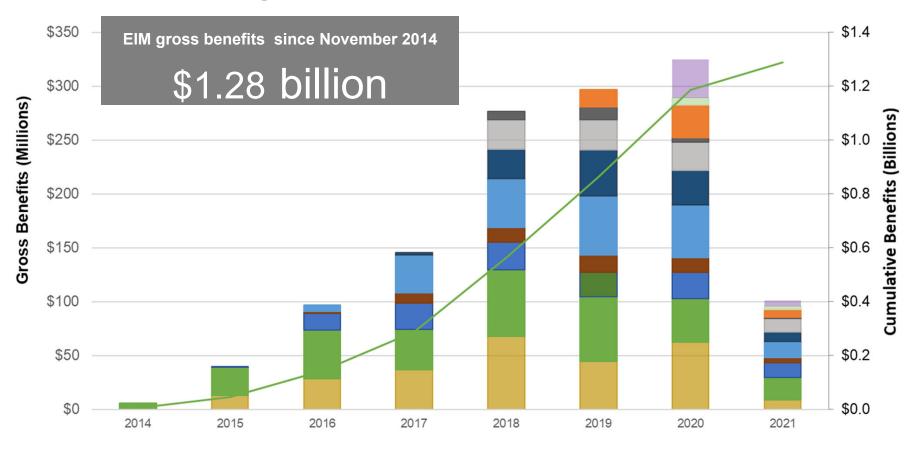
Briefing on western energy imbalance market and benefits

Guillermo Bautista Alderete Director – Market Analysis and Forecasting

EIM Governing Body Meeting General Session May 6, 2021



\$101.01 million gross economic benefits - Q1 2021

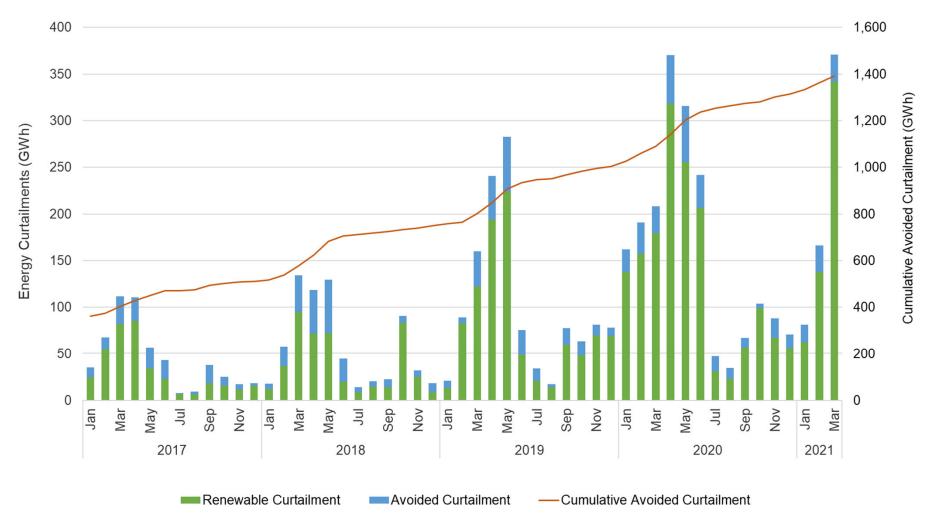


Individual Entity Benefits for 1st Quarter - millions

\$14.14 \$15.01 \$12.54 \$7.53 \$4.31 \$8.80 \$5.52 \$20.48 \$2.6 CISO PAC **NEVP PSEI AZPS** PGE **IPCO PWRX BANC** SCL **SRP**



Energy imbalance market helps avoid curtailment



Avoided curtailments since 2015 represent a reduction of 599 equivalent Tons CO₂



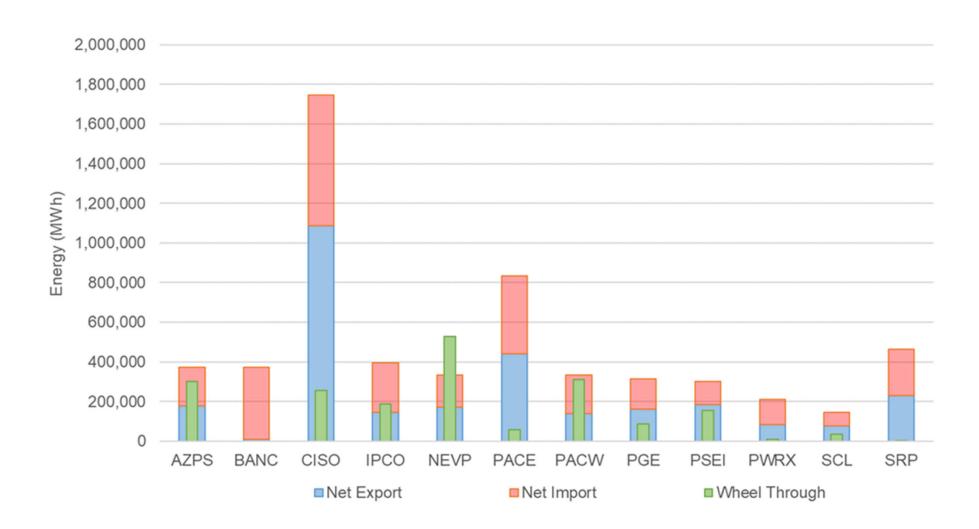


Flexible ramping procurement diversity savings Q1, 2021

	January		February		March	
Direction	Up	Down	Up	Down	Up	Down
Average MW saving (MW)	983	918	998	970	1,022	993
Sum of BAA requirements (MW)	1,956	1,804	2,011	1,943	2,188	1,978
Diversity Benefit	50%	51%	50%	50%	47%	50%
Estimated Savings	\$32,205	\$0	\$5,809	\$2,228	\$10,613	\$17,384

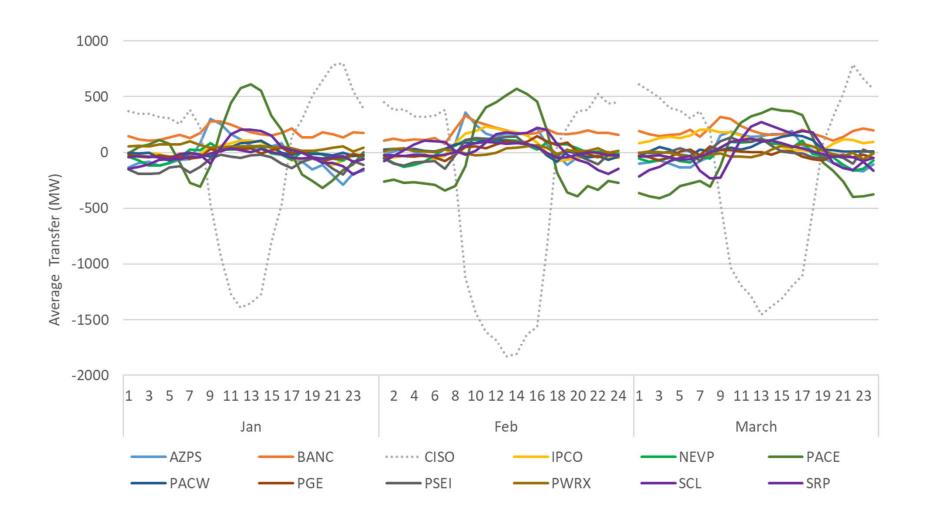


Estimated wheel-through transfers in Q1, 2021





Robust energy transfers in Q1, 2021

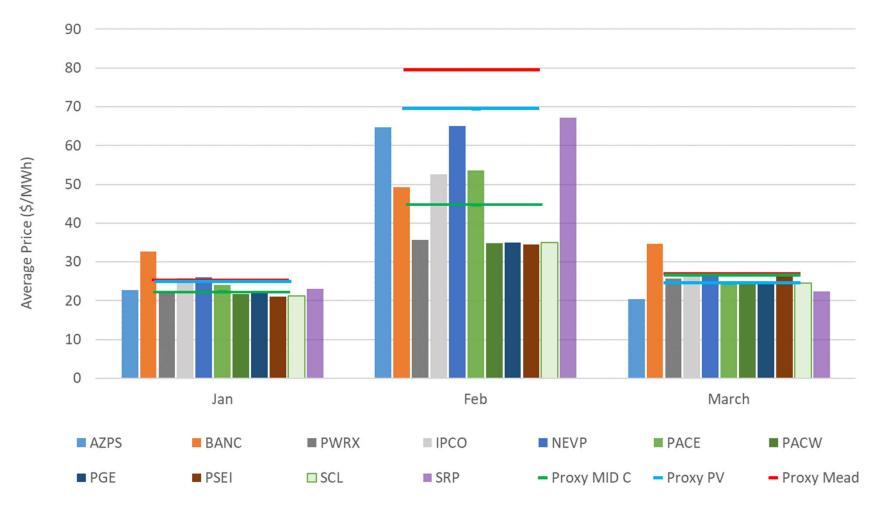


Transfer Axis: (+) Import (-) Export



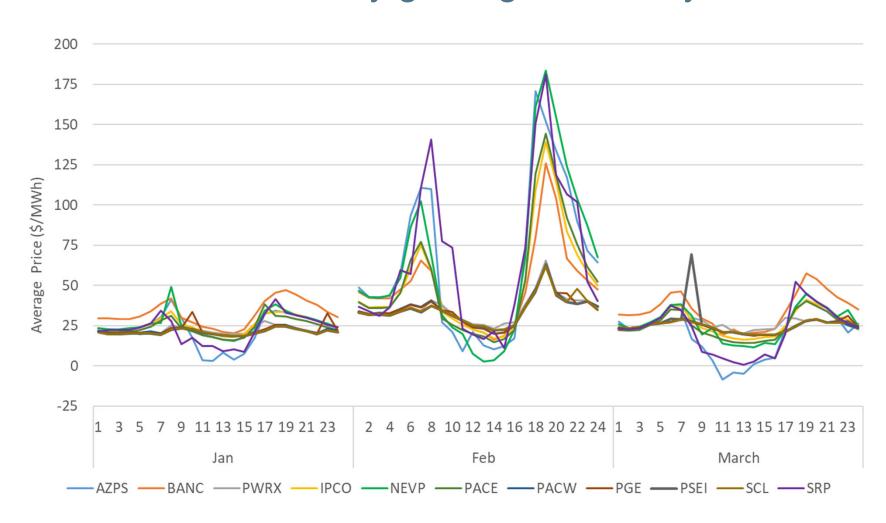


Monthly average prices increased mainly in the southwest areas in mid February given gas volatility in the US





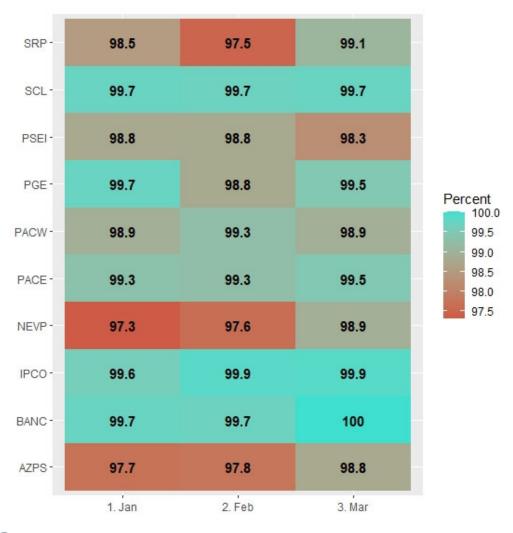
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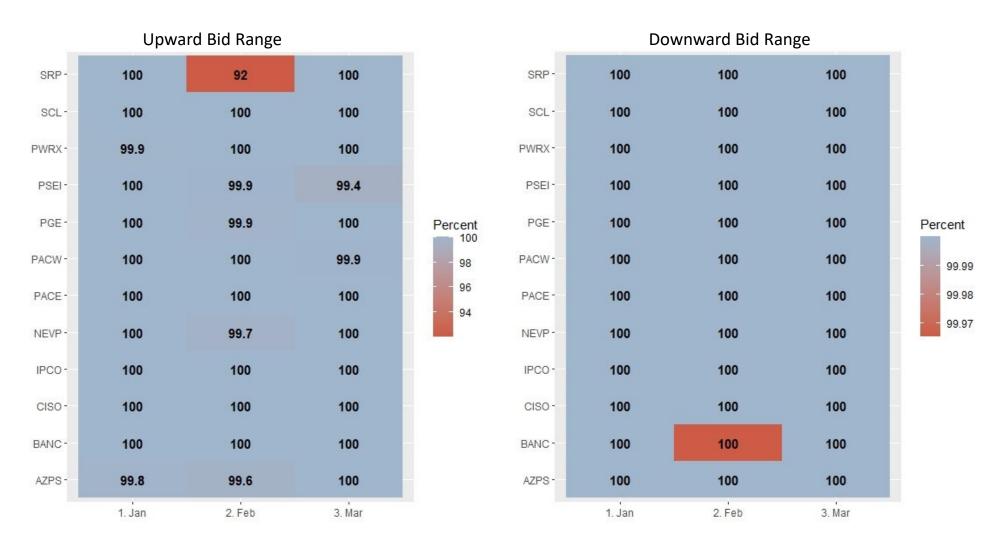




EIM entities passed the balancing test over 95 percent of the time



EIM entities passed the bid-range capacity test most of the times







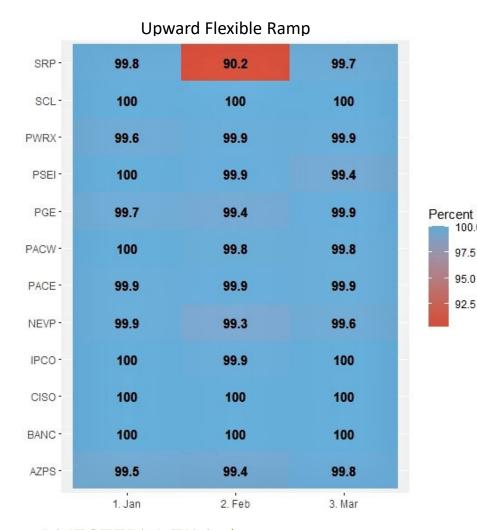
EIM entities passed the time the flexible ramp test at different rates

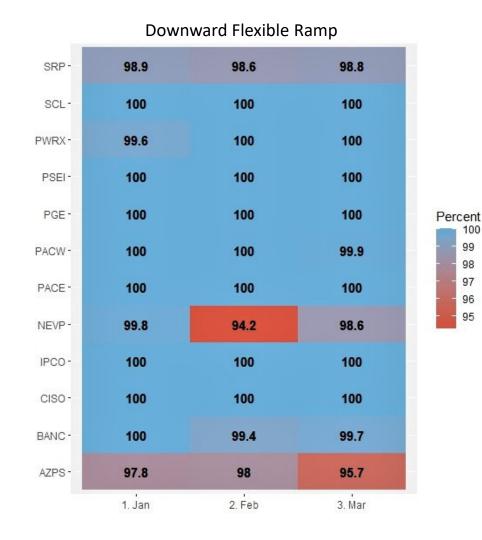
100.0

97.5

95.0

92.5









100 99

98

97

96

95

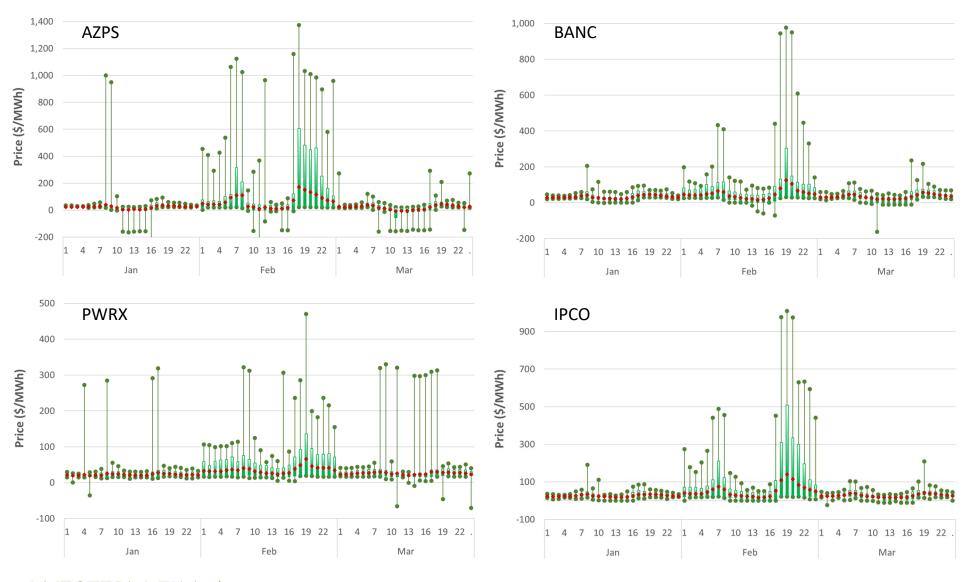
Appendix

Pricing Information

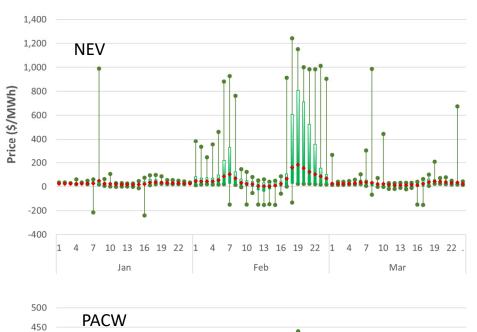


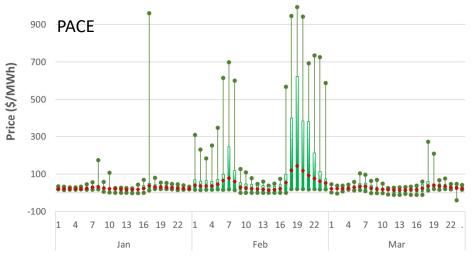


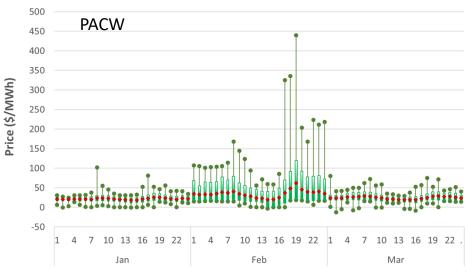
Fifteen-minute prices in Q1 2021

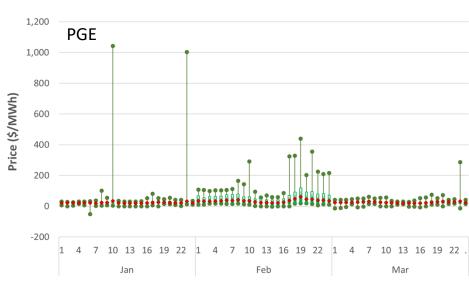


Fifteen-minute prices in Q1 2021











Fifteen-minute prices in Q1 2021

