

WESTERN ENERGY IMBALANCE MARKET

Market Monitoring Update

Eric Hildebrandt, Ph.D.

Executive Director, Department of Market Monitoring

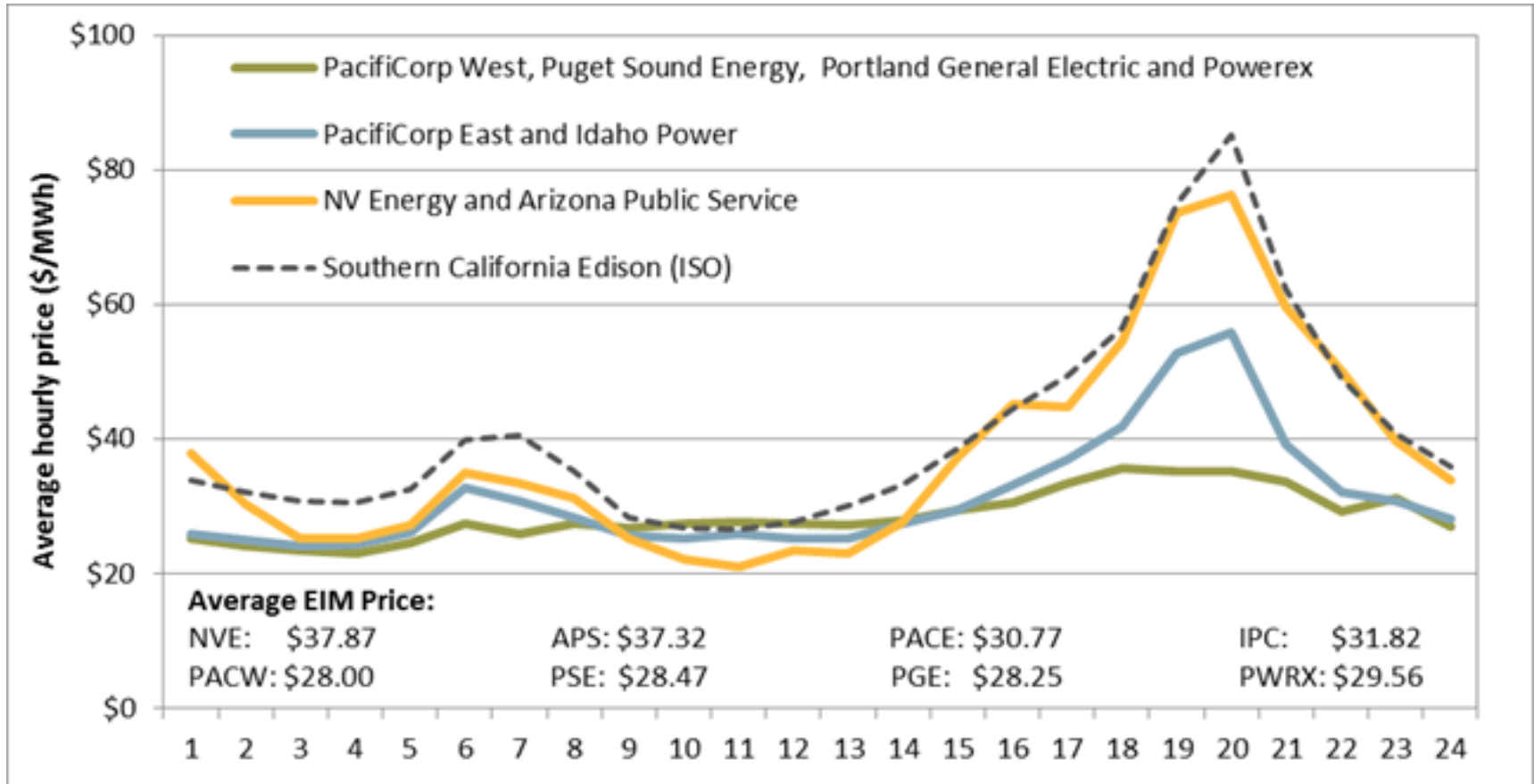
EIM Governing Body Meeting

General Session

January 24, 2019

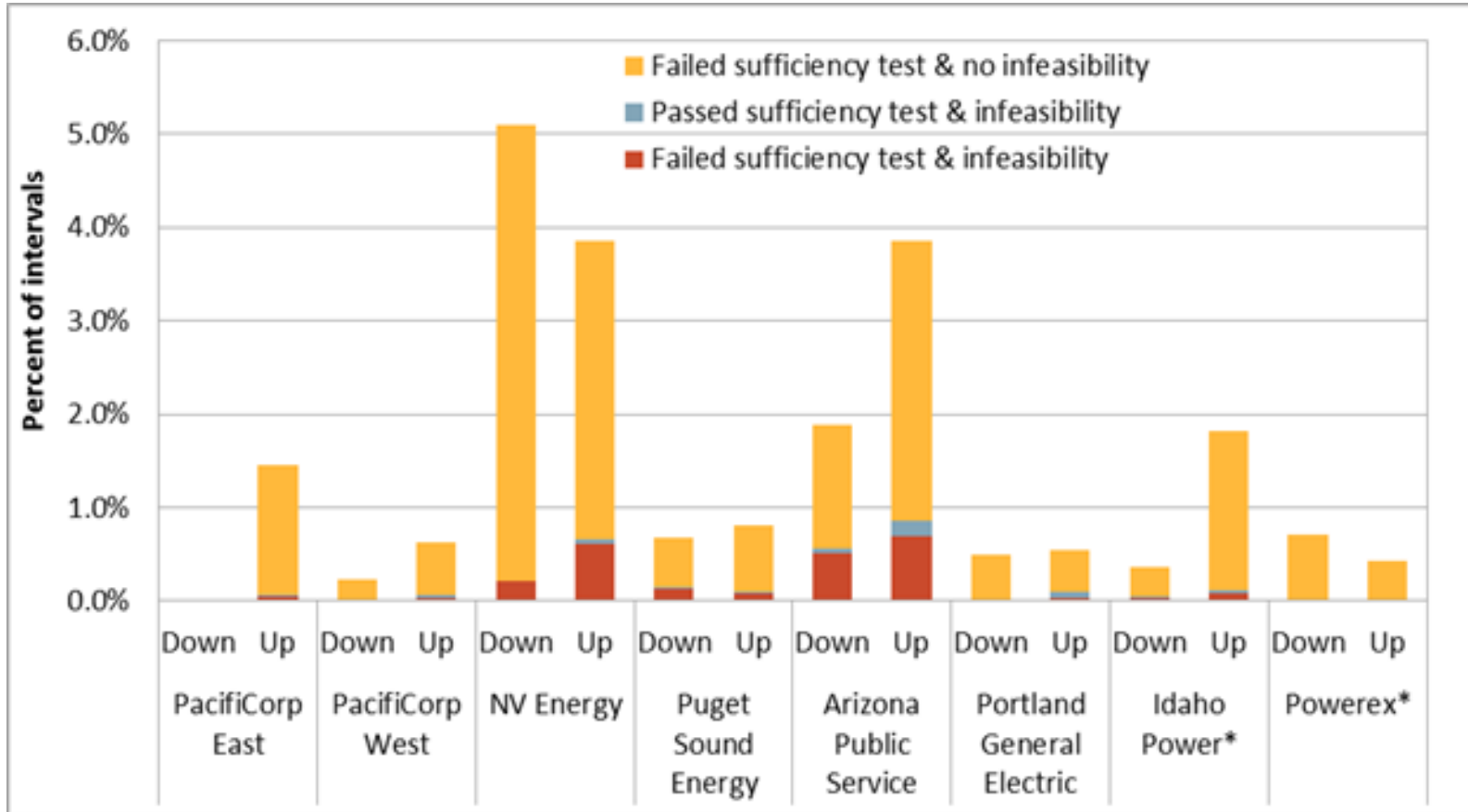


EIM prices in 2018 reflect regional supply conditions, transmission limits, and net loads.



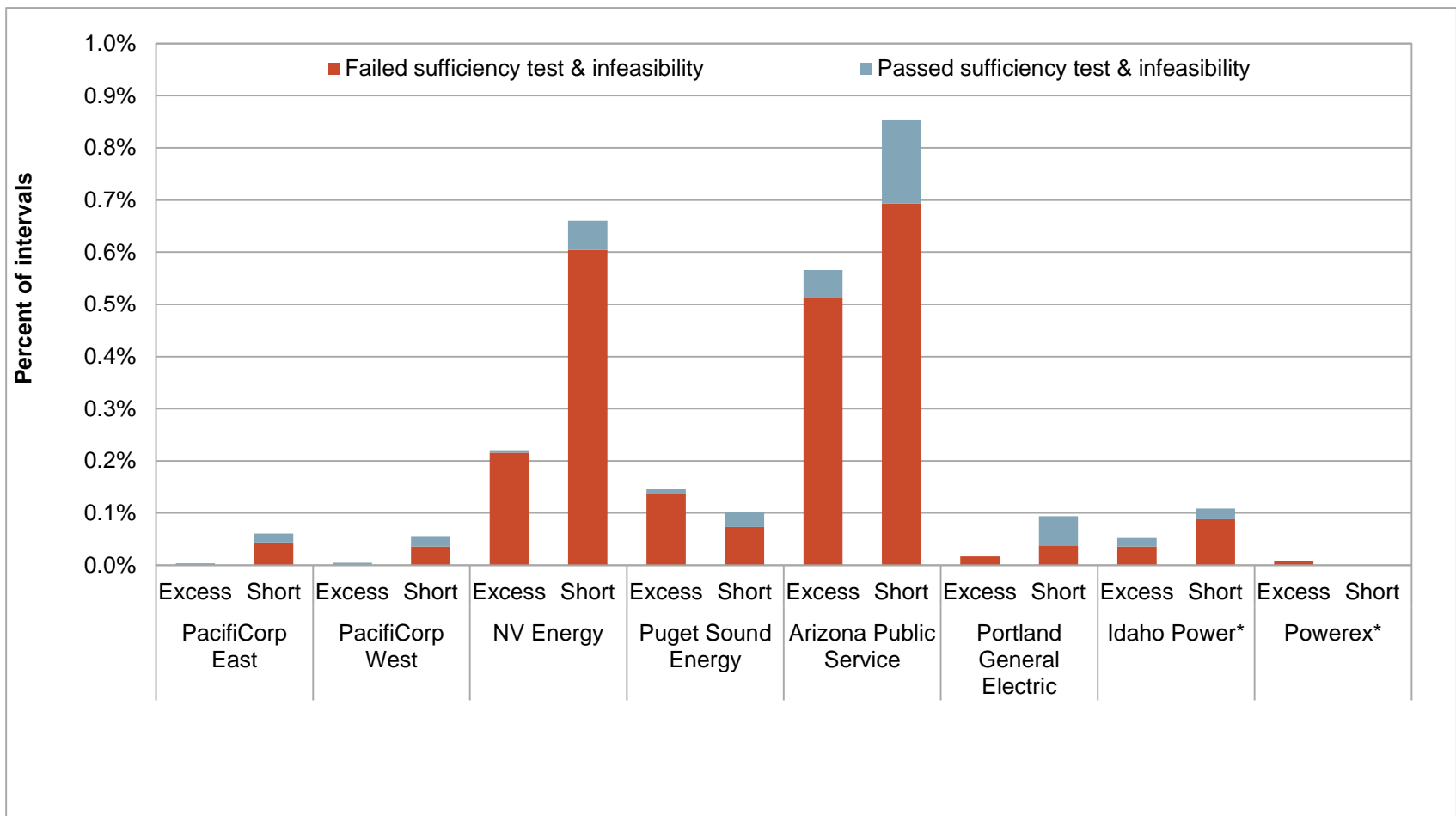
Average hourly 15-minute prices (April – December 2018)

Upward flexible ramping requirement test failures low in most areas, but 4 to 5% in some EIM areas during 2018.



Source: *EIM power balance constraint relaxation and imbalance conformance limiter*, DMM, January 18, 2019. <http://www.caiso.com/Documents/EIMpowerbalanceconstraintrelaxationandimbalanceconformancelimiter.pdf>

Flexible ramping requirement test failures lead to transfer limits – which contribute to power balance constraint infeasibilities in EIM areas.

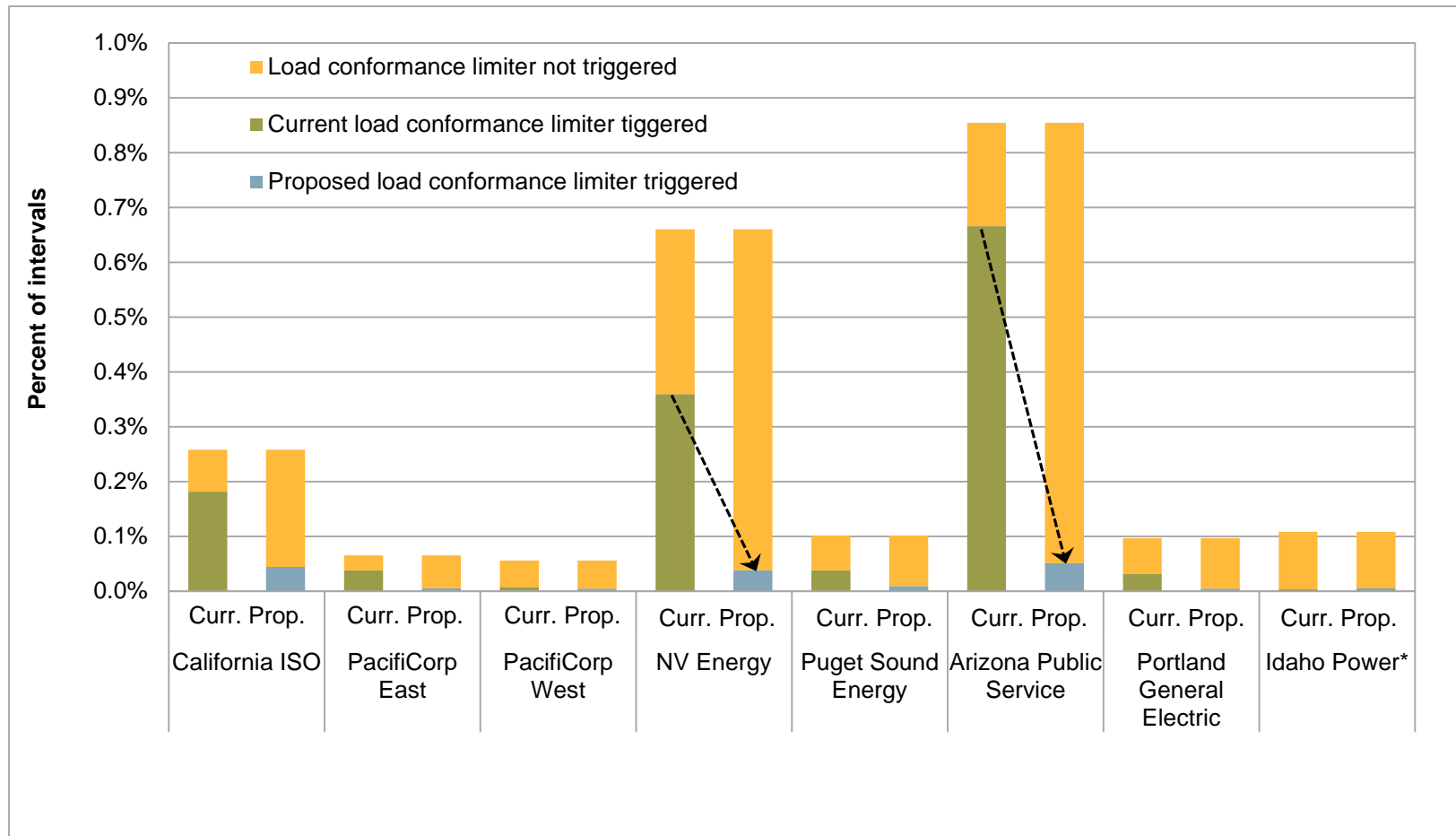


Changes to ramping sufficient test in EIM being implemented in spring 2019 include:

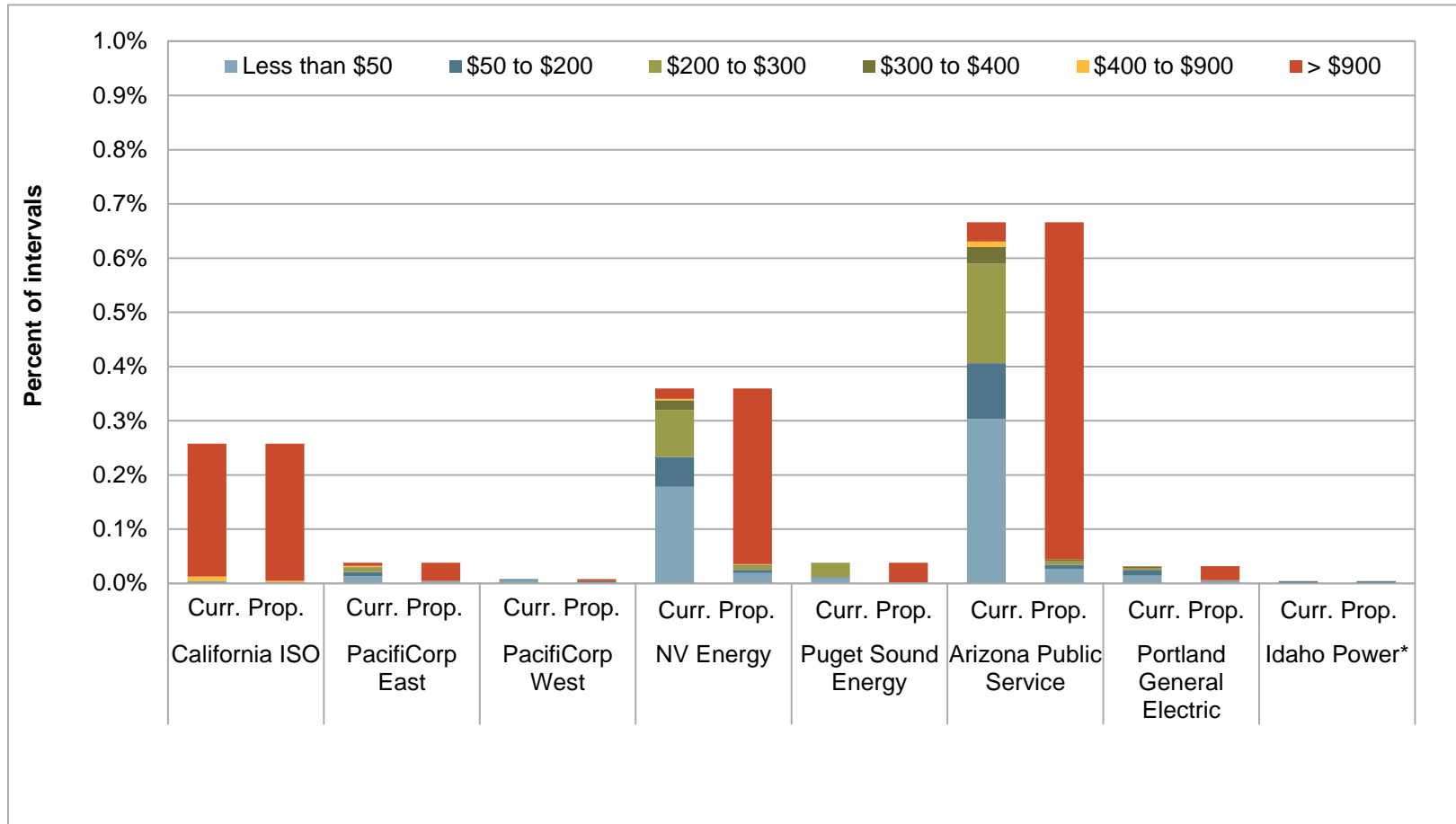
- Application of Bid Range Capacity and Flexible Ramp Sufficiency Tests at a 15-minute (vs. hourly) basis.
- Tolerance bandwidth threshold for small deviations from test requirements
 - Greater of 1% of BAAs uncertainty requirement or 1 MW.
- Provide EIM areas increased information and details of sufficiency evaluations.

Changes should provide more transparency and reduce test failures.

Changes in load conformance limiter planned for 2019 will significantly reduce when the limiter is triggered.



With current limiter, prices set by last dispatched bid in EIM areas are often much lower than \$1,000/MW penalty price otherwise used for infeasibilities.

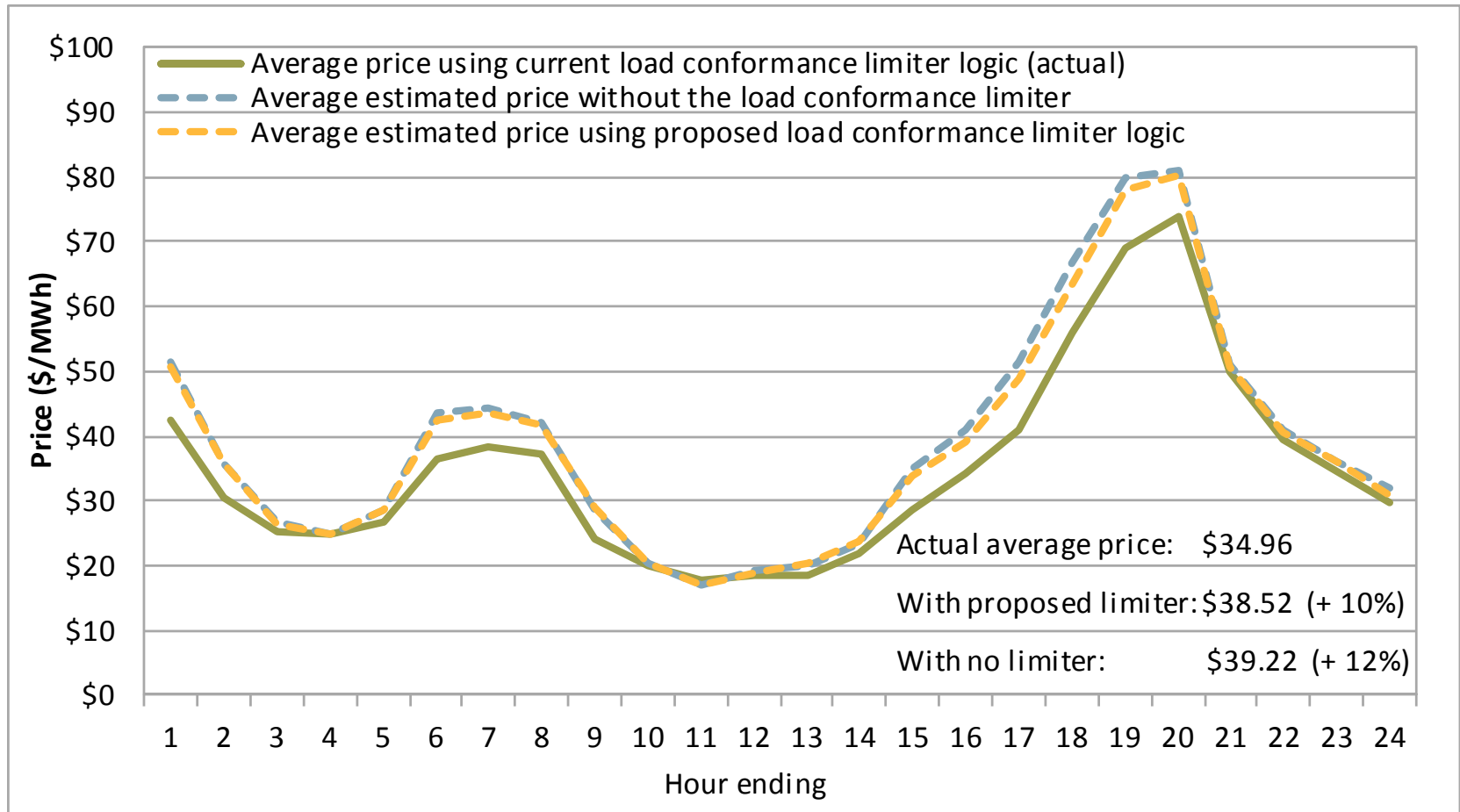


New load conformance limiter will have much lower impact on prices in two EIM areas.

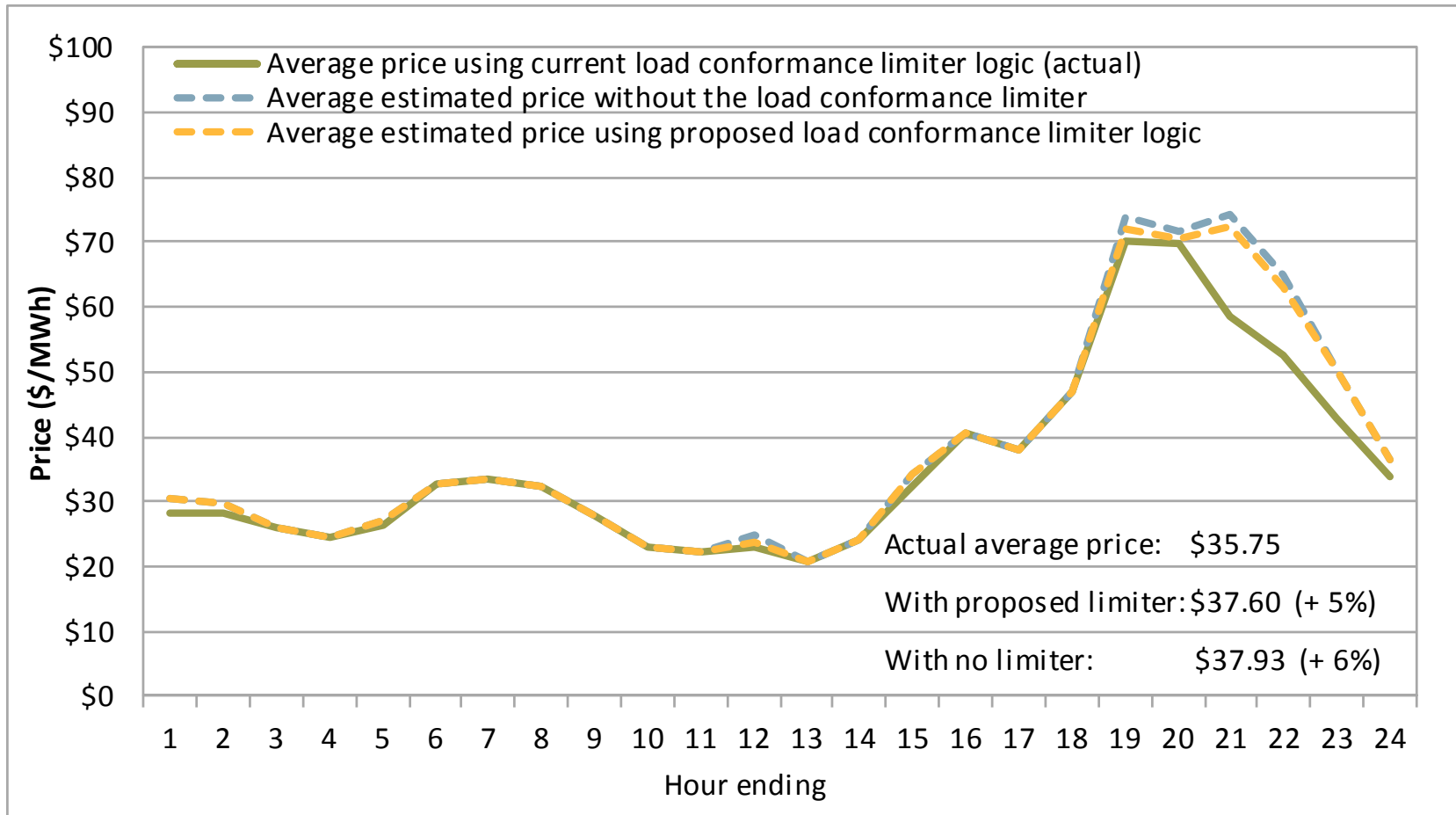
	Average price with current conformance limiter	Average price with proposed conformance limiter	Increase
<i>NV Energy</i>			
15-minute market (FMM)	\$35.75	\$37.60	5%
5-minute market (RTD)	\$35.30	\$37.91	7%
<i>Arizona Public Service</i>			
15-minute market (FMM)	\$34.96	\$38.52	10%
5-minute market (RTD)	\$34.66	\$39.33	13%

Impact of current and proposed load conformance limiter found to be minimal in CAISO and other EIM areas.

Impact of current and proposed load conformance limiter in APS (15-minute prices, 2018).



Impact of current and proposed load conformance limiter in NV Energy (15-minute prices, 2018).



Conclusions and recommendations

- DMM supports new load conformance limiter being proposed, but recommends EIM areas take action to mitigate potential priced impacts of new approach.
 - Review and monitor use and impact of load conformance.
 - Seek to reduce ramping sufficiency test failures.
- Changes to sufficiency tests should provide more transparency and help reduce failures.