

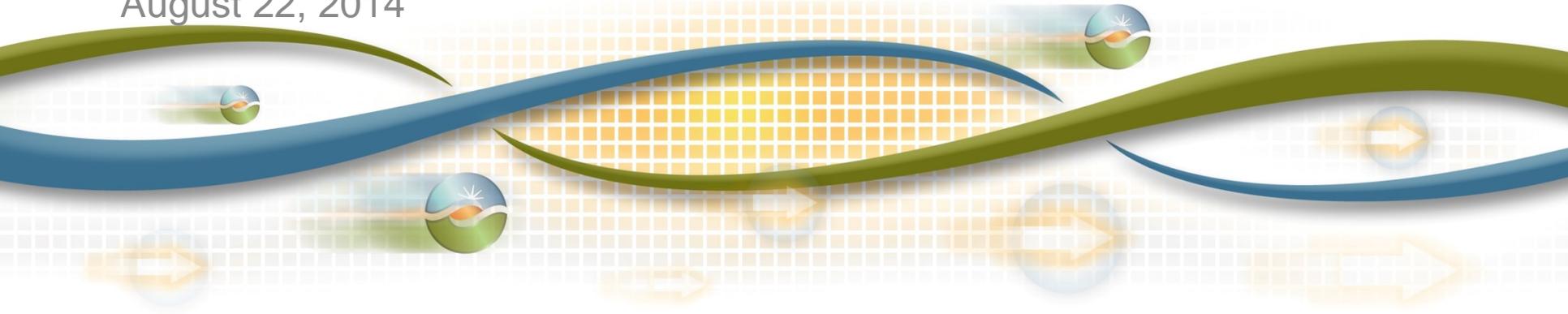


California ISO
Shaping a Renewed Future

Dynamic mitigation of start-up and minimum load costs

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General comments

- Dynamic mitigation of commitment costs has been considered since ~ 2010
- Still requires development of proxy bids that reflect updated gas prices and opportunity costs
- Would not have avoided problems in Feb 2014 within most severely gas constrained area, since energy constraint was binding
 - *ISO proposal effectively addresses this problem already*
- Appears relatively complex to develop and test (adequately and properly)
- Would still include bid cap to protect against gaps in design and software issues.

Cases requiring mitigation

- Energy and capacity constraints
 - Transmission
 - MOCs, contingency constraints
 - Ramping
 - System energy?
- Exceptional dispatches
- Scripts run by market operator to override market software.
- SLIC re-rates of operating characteristics
- Inaccurate unit operating characteristics
- Other BCR and software issues/gaps

Challenges

- Inter-temporal nature of constraints/commitments
- Complexity and dynamic nature of new constraints
- Difficulty of identifying all potentially binding constraints in pre-market runs
- Ex post mitigation would not prevent economic withholding, which:
 - Distorts unit commitment and dispatches
 - Inflates LMPs and uplift