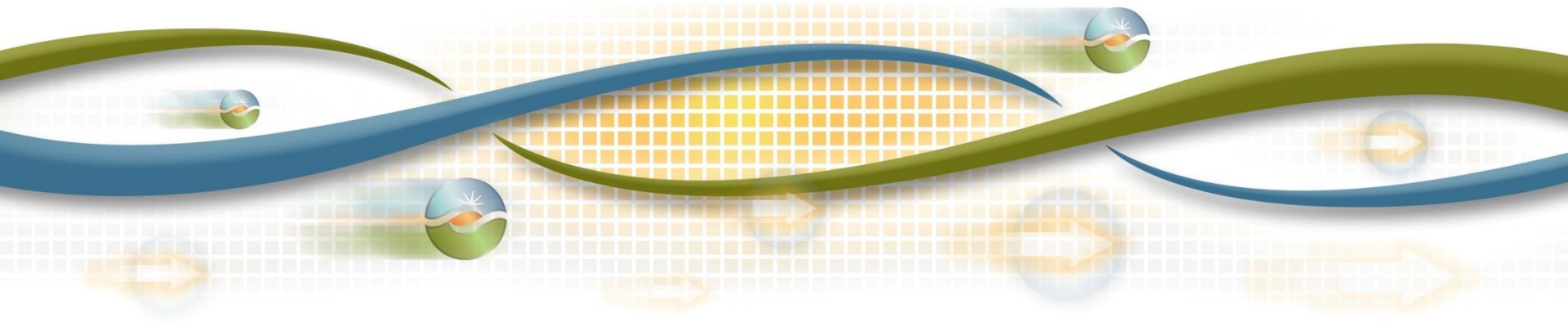# Modifications to the CRR clawback rule

Don Tretheway

Sr. Advisor, Market Design and Regulatory Policy

Stakeholder Conference Call
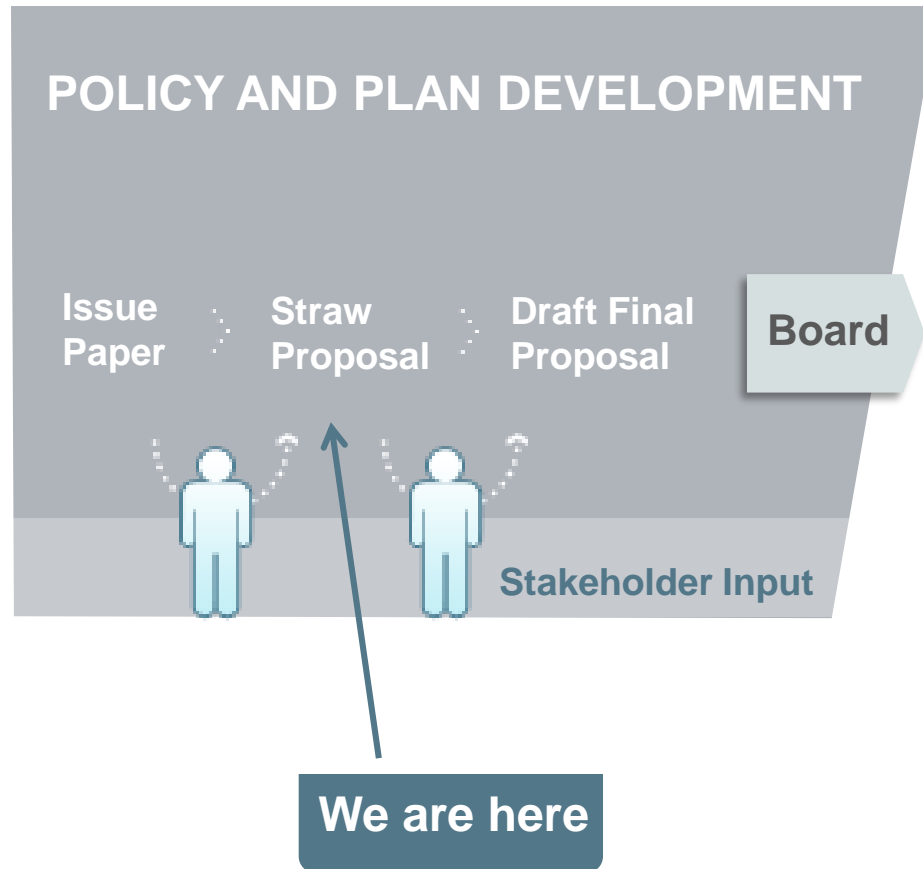
April 20, 2016

Agenda

Time	Topic	Presenter
1:00 – 1:10	Introduction	Kristina Osborne
1:10 – 2:50	Review Issue Paper/Straw Proposal	Don Tretheway
2:50 – 3:00	Next Steps	Kristina Osborne

ISO Policy Initiative Stakeholder Process

FMM intertie liquidity workshop identified the following issues

- Limited generation that will sell 15-minute energy

- Difficult to include hourly transmission cost in FMM bid
  - Incremental FMM awards are not guaranteed to be the same in each 15-minute interval
  - But, up to your day-ahead schedule the transmission cost has been paid by the day-ahead settlement

- TAC and uplift charges to Exports create additional hurdle

- CRR clawback rule always applies to interties schedule changes

CRR clawback rule was implemented with convergence bidding

- If "virtual awards" result in significant CRR impact, then the CRR payments are clawed back
    1. Exceedance of 10% of the thermal limit of a given constraint, and
    2. Contribution to the shadow price is in the direction to increase the parent SC's CRR portfolio value

- Imports/Exports are considered "virtual awards"
    - To address concern of implicit virtual biddings

- Cleared convergence bids at trading hubs and load aggregation points are <u>NOT</u> considered a "virtual award"

How can bidding intertie schedules mimic a convergence bid?

- **Virtual supply**
  - Clear a day-ahead import
  - Bid into FMM at a <u>high</u> price so import does not clear

- **Virtual demand**
  - Clear a day-ahead export
  - Bid into FMM at a <u>low</u> price so export does not clear

- **Don't tag your day-ahead schedule**
  - HASP reversal rule created to incentivize tagging of day-ahead schedules

California ISO

(1) If an intertie schedule is bid into real-time and meets the follow conditions, it is not considered a "virtual award"

- Import/export passes the HASP reversal rule test
    - E-tag supports day-ahead schedule prior to FMM

- Import bid <= day-ahead price

- Export bid >= day-ahead price

- Bid range is greater than or equal to the day-ahead schedule
    - If less than day-ahead, the difference is a "virtual award"

(2) Include convergence bids at trading hubs and LAPs when calculating the impact on CRR holdings

- Shift factor of the aggregation points can result in congestion

- There is a flow impact from aggregation points, just as there is at individual nodes

- CRR clawback rule test should treat all convergence bids in the system the same when calculating impact

Next Steps

Item	Date
Post Issue Paper & Straw Proposal	April 13, 2016
Stakeholder Conference Call	April 20, 2016
Stakeholder Comments Due	May 4, 2016
Post Draft Final Proposal	May 16, 2016
Stakeholder Conference Call	May 23, 2016
Stakeholder Comments Due	June 3, 2016
Board of Governors Decision	June 28-29, 2016

Please submit comments to InitiativeComments@caiso.com