Market Settlement User Group Agenda
April 17, 2019
10:00 a.m. – 11:00 a.m. (Pacific Time)

Web Conference Information	Conference Call Information	
URL: https://caiso.webex.com/meet/settlementuser	Domestic Call In:	(866) 528-2256
Meeting Number: 961 854 046	International Call In:	(216) 706-7052
(Please provide your name and email address to join the meeting)	Pass Code:	6737864

Time	Topic	Presenter
10:00 – 10:10	Welcome and Introduction	Monica Breck
10:10 – 10:20	Settlement Status Updates ▪ Production ▪ Release & Market Simulation ▪ BPM	Monica Breck Elizabeth Caldwell Bonnie Peacock
10:20 – 11:00	Open Discussion ▪ CRR Auction Efficiency 1B Update	Jeremy Malekos

Settlements Status Updates

For Market Settlements User Group

Status Report Date: 4/17/2019

By: Market Settlements Production (MSP)

External Use

Market Settlement User Group – 4/17 Settlements Status Updates

- Latest status on market invoices and the settlement statements publication.

Settlements Configuration Release, Market Simulation, and PRR

For Market Settlements User Group

Status Report Date: 4/17/2019

By: Market Settlements Design and Configuration (MSDC)

External Use

Market Settlement User Group – 4/17 Release Update

- On track for Q1 2019 Spring Configuration release
  - Release components and configuration output file publication plan was re-sent **3/14**
    - 1st draft config file: **3/28 - Published**
    - Pre-prod config file: **4/17**
    - Prod deployment: **4/24**
  - **Scope:**
    - Annual CPM Automation
    - RAAIM BD duplicate correction
    - Spin Non-Spin pre-calc correction

- Emergency MSS Load Following release
  - PRR 1153 is the only release component
  - Deployment plan below
    - 1st draft config file: **published 4/9**
    - Pre-prod config file: **5/1**
    - Prod deployment: **5/8**

Market Settlement User Group – 4/17 MSDC report

PRR/BPM status:

- **Below PRR has been created as an Emergency PRR, please refer to 4/4/19 market notice**
  PRR1153 - Update the pre-calculation MSS Deviation Penalty Quantity configuration to properly calculate the MSS Expected IIE as per the MSSA Agreement definition (Effective Date: 1/1/2018)
    - ***1st Comment Period***:   4/4/19 - 4/18/19

- ***2nd Comment Period***:   expired 4/16/19
    - PRR1144 - Update the pre-calculation MSS Deviation Penalty Quantity configuration to properly address negative SUPP quantities for cases where Day Ahead Award is zero for MSS LF resources (Effective Date: 10/1/2014)
    - PRR1148 - Updated BPM Configuration guide for PC System Resource Deemed Delivered Energy Quantity 5.3 to ensure CISO dynamic system resources LMC quantity is not derived at twice the value it should be (Effective Date: 5/1/2019)

- Next BPM meeting for Settlements will be held on 4/23/19

CRR 1b Settlement Issues cont.

April 17, 2019

Jeremy Malekos: Manager – Market Settlement Design & Configuration

CRR Auction Efficiency 1B update cont. - Agenda

- Update on current issues since deployment
  - Settlement calendar re-run date to resolve issues
- Settlement calculation validation example of CRR 1B notional value
- Exceptions to Notional Value calculation
- Offset Calculation discussion

California ISO

CRR Auction Efficiency 1B update cont. – Issue #1

- Anode shift factor missing at SLAPs and CLAPs when the effective shift factor is below 2%.

- Resolution: Working as designed for trade dates 1/1/2019 through 02/28/2019.This issue was resolved as of 3/1/2019 indirectly by applying PIME methodology to SLAP, CLAP and for any aggregate location that we extend the PIME logic

CRR Auction Efficiency 1B update cont. – Issue #2

- POD shift factor vs. Resource shift factor. Anode vs. APNODE pricing.
- Resolution: CAISO will fix this issue for all the impacted trade dates from 1/1/2019. We created a defect to fix the issue in the market going forward. CRRS workaround to be implemented no later than 4/30/2019 and this workaround will fix the issue for all prior trade dates starting 1/1/2019.
    - Workaround fix went into production on 4/8/2019, first trade date will be rerun with this fix would be T+3B recalc for 4/8/2019.
    - Based on the settlement rerun calendar approximate time-line:
        - Trade date 1/1/2019 – 2/01/2019 – will be corrected in T+9M recalc
        - Trade date 2/02/2019 – 3/30/2019 – will be corrected in T+55B recalc
        - Trade date 3/31/2019 – 4/7/2019 – will be corrected in T+12B recalc
        - Trade date 4/8/2019 forward will be corrected in T+3B initial calc

CRR Auction Efficiency 1B update cont. – Issue #3

- Missing shift factors for Nodes related to ITCs. The issue here is, there are two CNODES and both have Shift factors. However, only one SF is being transferred to CRR engine. Based on our research, it seems that when the schedule is Zero, the respective SF is missing and not being transferred to CRR engine.

- Resolution: CAISO will be making corrections to all the impacted trade dates. Market fix going forward, CRRS work around implemented to fix impacted trade dates from 1/1/2019.

  – Workaround fix went into production on 3/21/2019.

    - Based on the settlement rerun calendar approximate time-line:
    - Trade date 1/1/2019 – 1/15/2019 – will be corrected in T+9M recalc
    - Trade date 1/16/2019 – 3/13/2019 – will be corrected in T+55B recalc
    - Trade date 3/14/2019 – 3/21/2019 –corrected in T+12B recalc
    - Trade date 3/22/2019 forward corrected in T+3B initial calc

CRR Auction Efficiency 1B update cont. – Issue #4

- Shift factors at Generic Trading Hubs.
- Resolution: CAISO will be making corrections to all the impacted trade dates. As for Market fix going forward, CRRS work around implemented to fix all impacted trade dates from 1/1/2019.
  - Workaround fix went into production on 3/21/2019.
    - Based on the settlement rerun calendar approximate time-line:
    - Trade date 1/1/2019 – 1/15/2019 – will be corrected in T+9M recalc
    - Trade date 1/16/2019 – 3/13/2019 – will be corrected in T+55B recalc
    - Trade date 3/14/2019 – 3/21/2019 –corrected in T+12B recalc
    - Trade date 3/22/2019 forward corrected in T+3B initial calc

CRR Auction Efficiency 1B update cont. – Issue #5

- CAISO identified that some of the CNODEs at disconnected locations are not getting their Shift Factors corrected.

- Resolution: CAISO will be making corrections to all impacted trade dates. CRRS fix is in progress, and CRRS work around will be implemented to fix all impacted trade dates from 1/1/2019.

  – Software fix is under testing, target to deploy in production in the week of 4/8/2019.

CRR Auction Efficiency 1B update cont. – Issue #6

- Data transfer issues between two applications (PCA and MQS). Due to this, we are not publishing the constraint data from CRRS to other systems.

- Resolution: Data clean up and work around is being performed. CRRS fix will be in next patch (estimated prod date 4/18/2019 and will apply to all trade dates forward and correct all prior trade dates from 1/1/2019.

  - This scenario happens whenever we have DA ahead price corrections, so far we had DA price corrections only for two trade dates 2/21/2019 and 2/22/2019 and these two trade dates will be corrected in T+55B recalc.

CRR Auction Efficiency 1B update cont. – Issue #7

- Parsing of Nomogram names affecting CRRS.

- Resolution: Data clean up and work around is being performed. The issue was that the settlements system was not able to parse some special characters, and a decision was made not to fix the settlement system.   This required a change in OE procedures going forward and cleanup of historical data back to 1/1/2019.

  - We did the data cleanup and all the corrected data will reflect in T+55B recalc from trade date 1/1/2019 onwards.

CRR Auction Efficiency 1B update cont. – Settlement calculation validation of CRR Notional Value

- How to validate CRR 1B Notional Value utilizing Settlements, OASIS and CMRI

- Data needed:
  - LMP/MCC data from OASIS
    - ([MCC at sink] – [MCC at source]) * netted MW
  - CMRI CRR reports
  - CC 6700 Settlement Statement
  - See reference Documents for detailed example

California ISO

CRR Auction Efficiency 1B update cont. – Settlement calculation of CRR Notional Value exceptions

- Exceptions
  - Rounding differences
  - MLAP's – PIME logic not applied, as a results the Shift Factors created may not be consistent with prices calculated in the market.

California ISO

CRR Auction Efficiency 1B update cont. – Settlement calculation of Offset

- Review in progress

California ISO

Questions

Thank You

California ISO