



California ISO

CRR 1B Post Implementation issues

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CRR Auction Efficiency 1B update cont. - Summary

- Offsets - Calculation at constraint level, required for shadow settlement of CRR 1b.
 - Data required
 - Data location
 - Sample file: Pnode and Apline shift factors posted on 5/30.
 - BRS to post on release planning page under independent projects date TBD.
 - PMO seeking estimates, plan to schedule delivery on or after Fall release.

CRR Auction Efficiency 1B update cont. — Offset Calculations

- Data needed to calculate Offset values:
 - IFM Net Flow by constraint by contingency case by interval
 - Prevailing direction of IFM Net Flow at constraint
 - Sum total of Clawback & Circular Scheduling MWs by constraint by contingency case by interval
 - Total CRR Flow by constraint by contingency case by interval
 - Shift Factors at Source and Sink by constraint by contingency case by interval

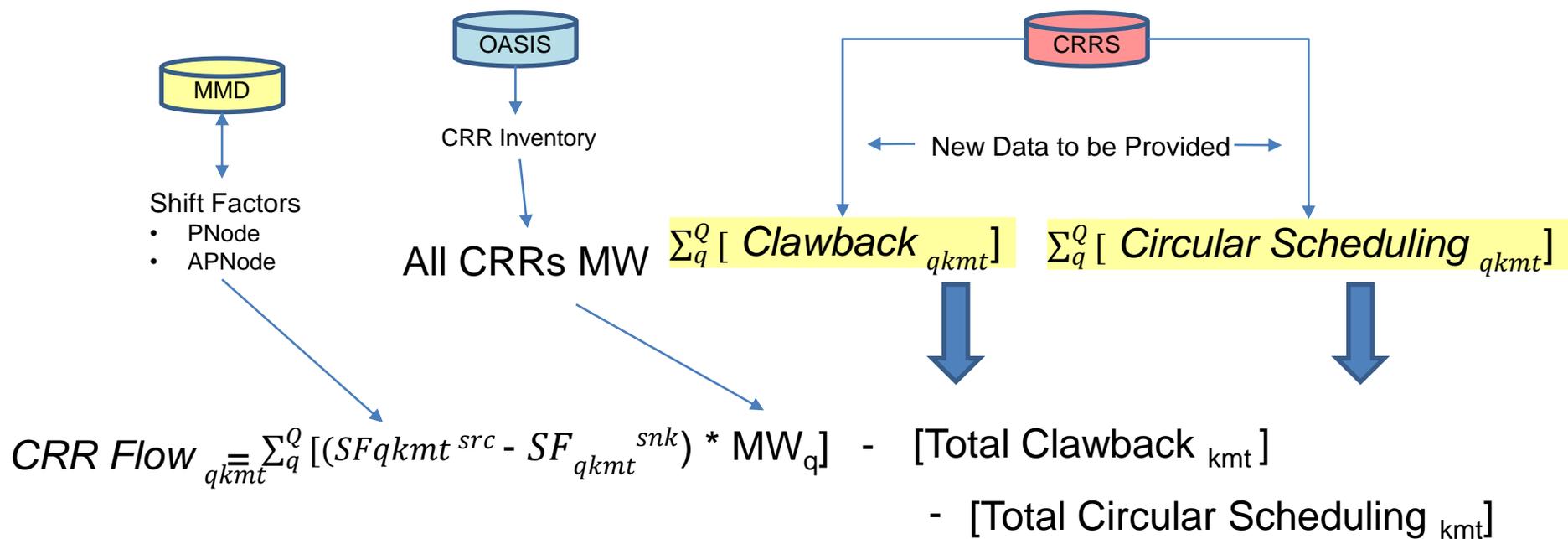
CRR Auction Efficiency 1B update cont. – Offset Calculations

- Data will be available as follows:
 - IFM Net Flow => CAISO will provide (Location – OASIS)
 - Direction of IFM Net Flow => Directional Flag will be provided with IFM Net Flow (1) or (-1) (Location – OASIS)
 - Clawback & Circular Scheduling MWs => CAISO will provide (Location – OASIS)
 - CRRs => Total inventory for all CRRs is available on OASIS (Existing)
 - APNode Shift Factors => CAISO will provide in Market Modeling Database (MMD) (NDA Folder)

CRR Auction Efficiency 1B update cont.

- ISO plans to publish the following additional data sets (prospectively)
 1. Day Ahead Shift factors for each APNode
 - Similar file we produce today for Shift factors (NDA required to access)
 - ISO published a sample file for review
 2. Net IFM Flow - Positive or Negative to represent the direction of congestion
 3. Directional Flag - Indicates prevailing direction of flow at the constraint
 4. Single value representing sum total of Clawback & Circular Scheduling MWs
- Settlement calculation of Offset at constraint level
- How-to calculate Offset at a constraint level for a portfolio

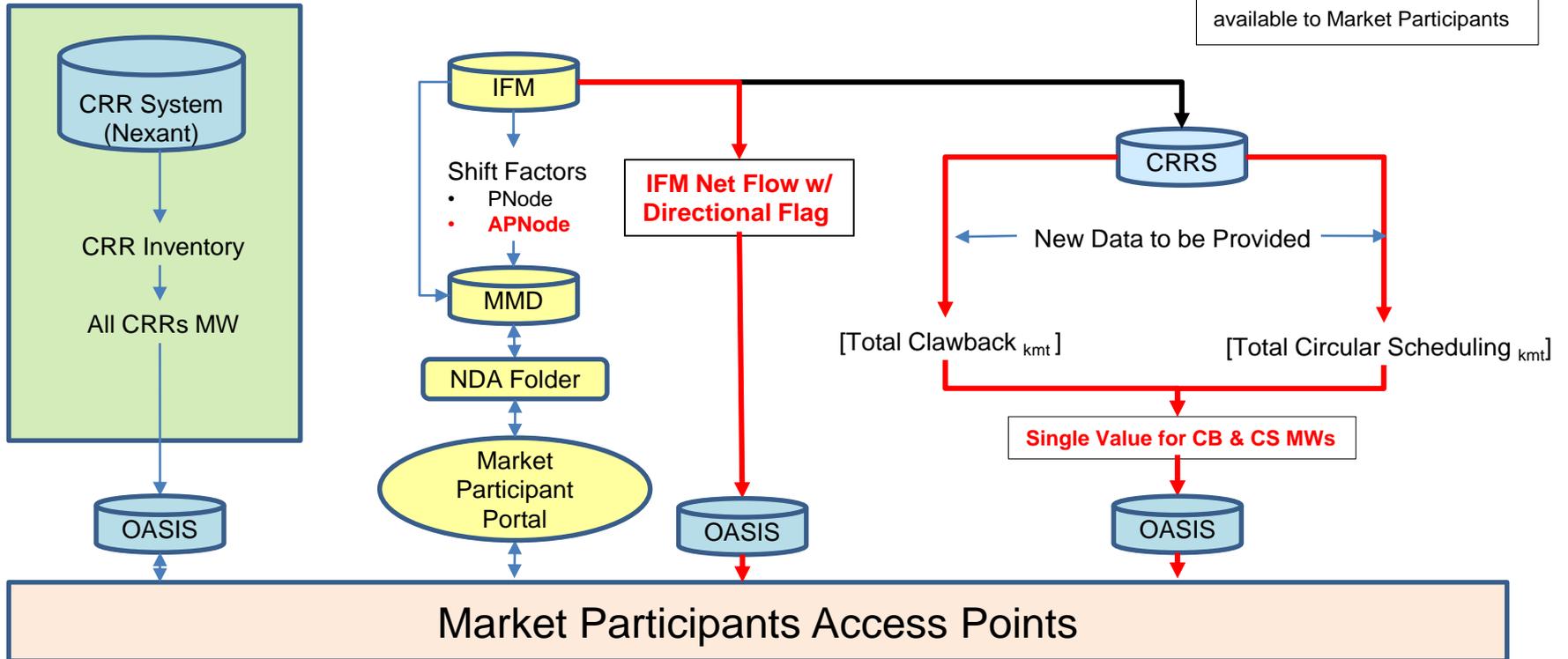
Offset Calculations – Data & Formula



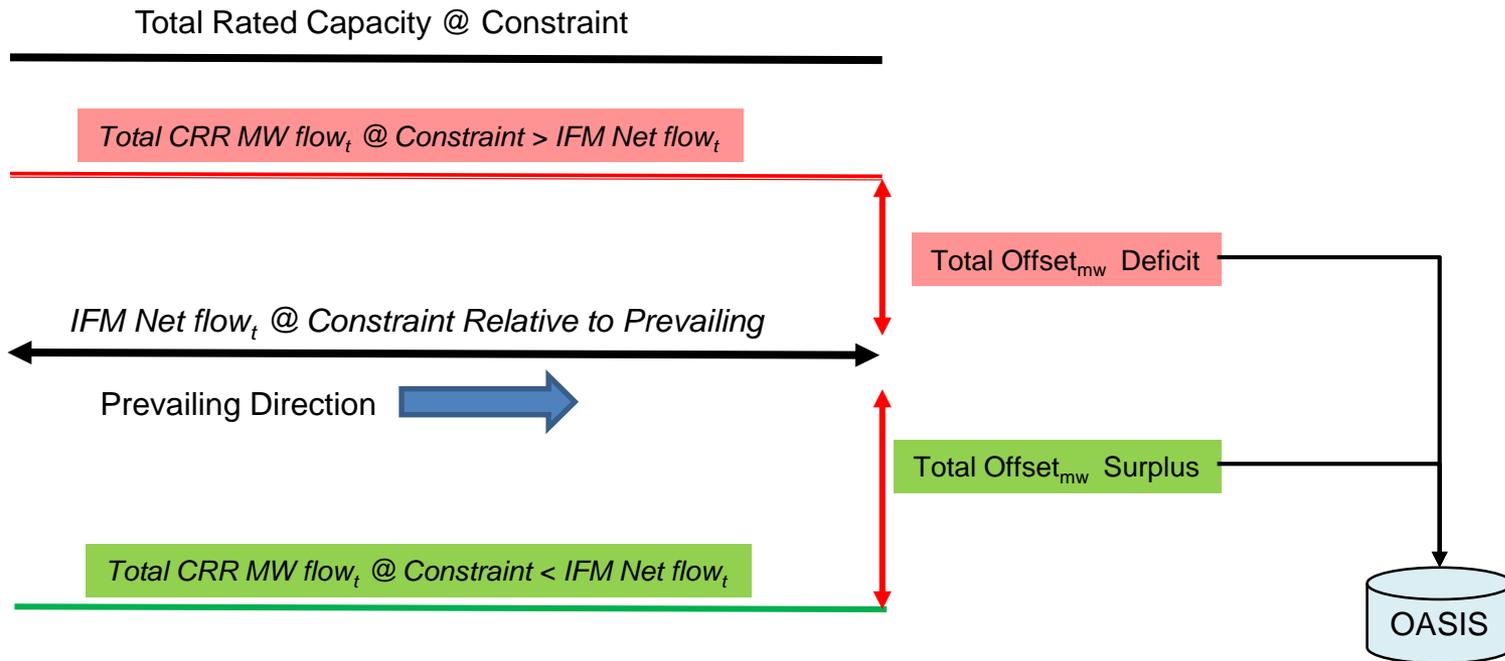
Data Sources and Flows

Legend:

RED text indicates new data available to Market Participants

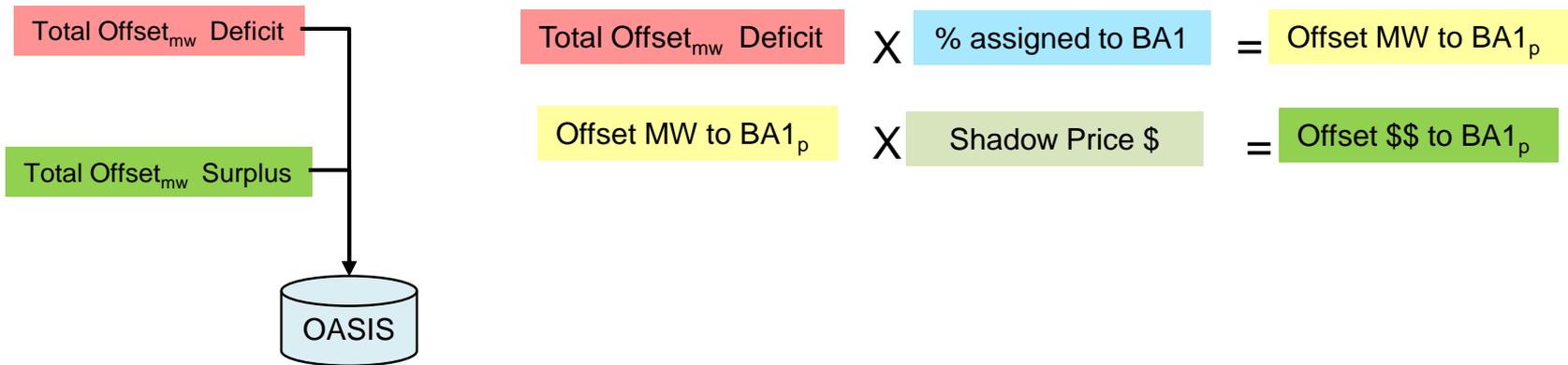


Offset Calculations – Deficit & Surplus



Offsets at Portfolio (BA) Level

Alpha Factor (%) =>
$$\frac{\text{Total CRR MW}_p \text{ for BA1 Portfolio @ Constraint}}{\text{Total CRR MW}_p \text{ for all Portfolios @ Constraint}} = \text{\% assigned to BA1}$$



Questions



Thank You
