



Joint and Common Market

# I. IMPROVED DAY-AHEAD COORDINATION

# Overview

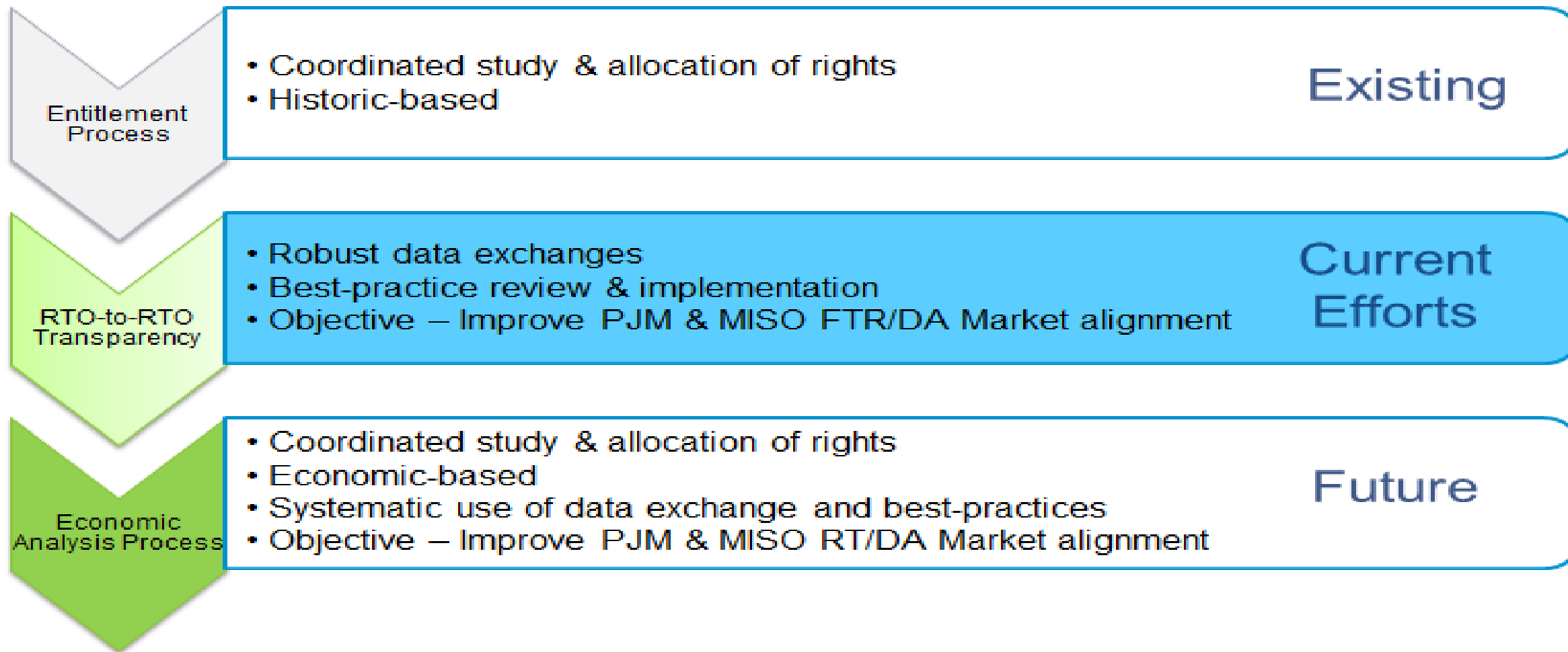
## Purpose

- Provide stakeholder update on PJM/MISO efforts to improve Day-Ahead Market coordination

## Key Takeaways

- PJM/MISO Day-Ahead data exchange has been established. Continued efforts to support data integration into business processes.
- Joint benefit study of optimizing seams flowgates in the Day-Ahead Market demonstrate increased efficiencies
  - Lower overall production costs
  - Reduced costs for M2M exchanges/settlement (DA vs. RT)
- PJM & MISO recommend implementing processes to better align Day-Ahead flowgate use with Real-time expectations.
  - Results in Day-Ahead settlement for M2M exchanges

# DA Market Coordination Progression



# Value of Day-Ahead Market Coordination



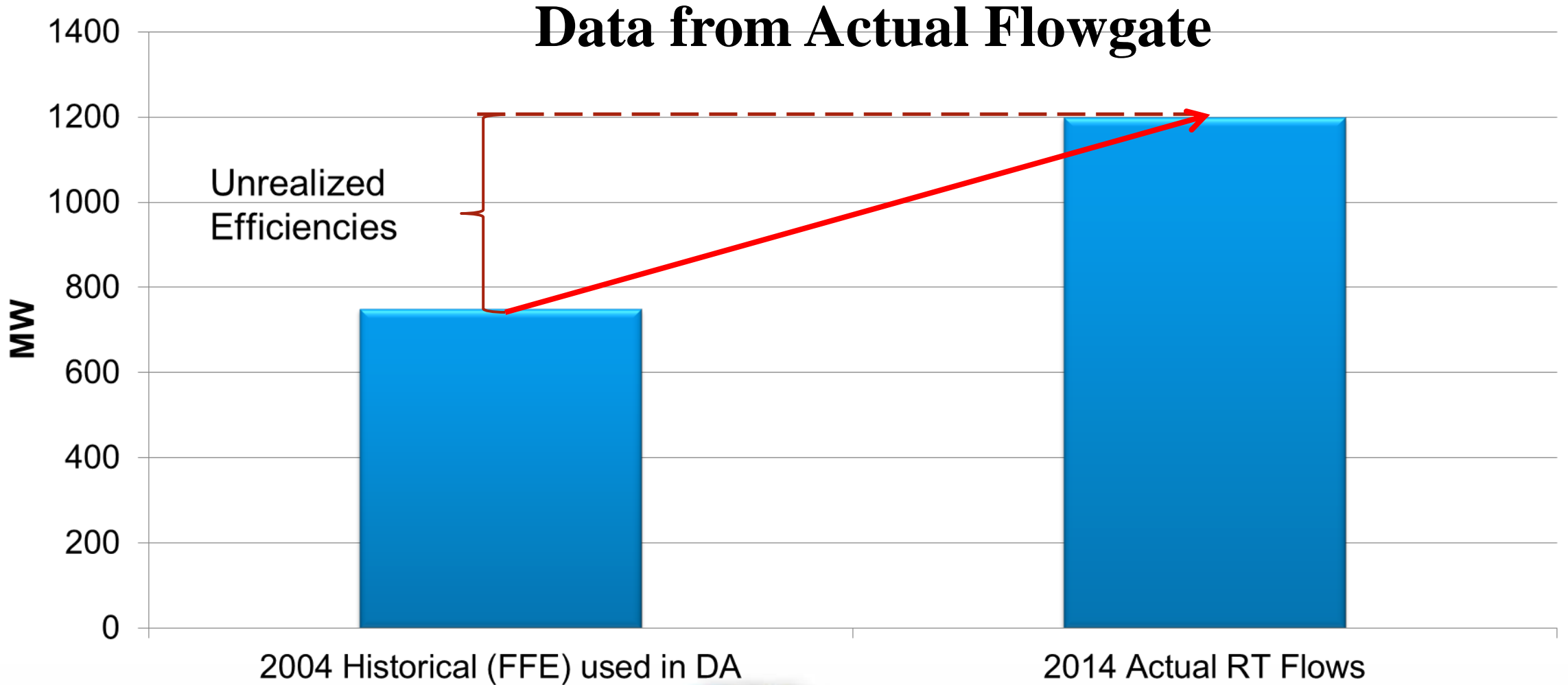
## **Currently provides a basis for coordination prior to the operating day**

- Reliability
  - Congestion Management Process (CMP) provides a coordinated allocation
  - Ensures the transmission facilities are not oversubscribed between RTOs
- Impacts commitment of majority of resources used in operations

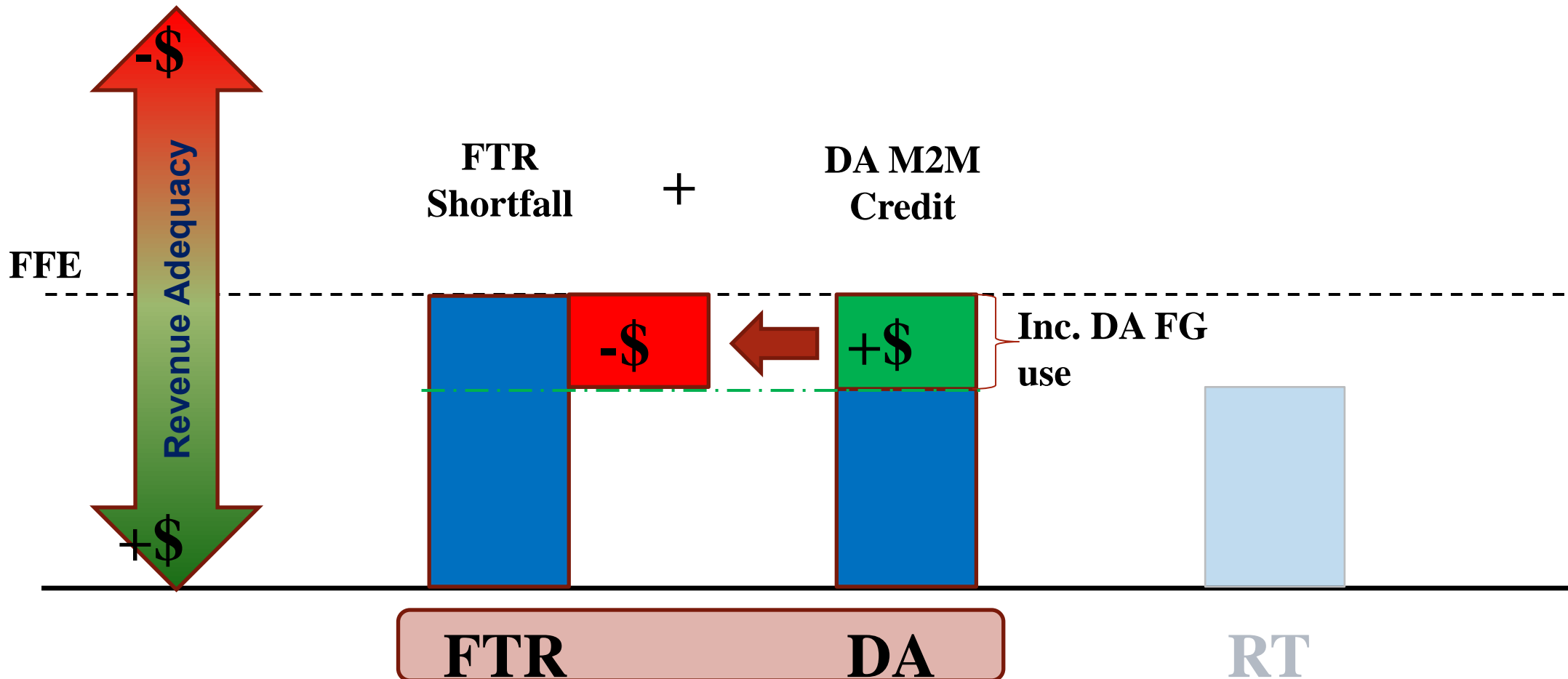
## **Adding DA Market Firm Flow Entitlement Exchange**

- Increases economic efficiency and market transparency
- Provides enhanced structure for market Revenue Adequacy (Financial Transmission Rights, Day-Ahead and Real-Time)

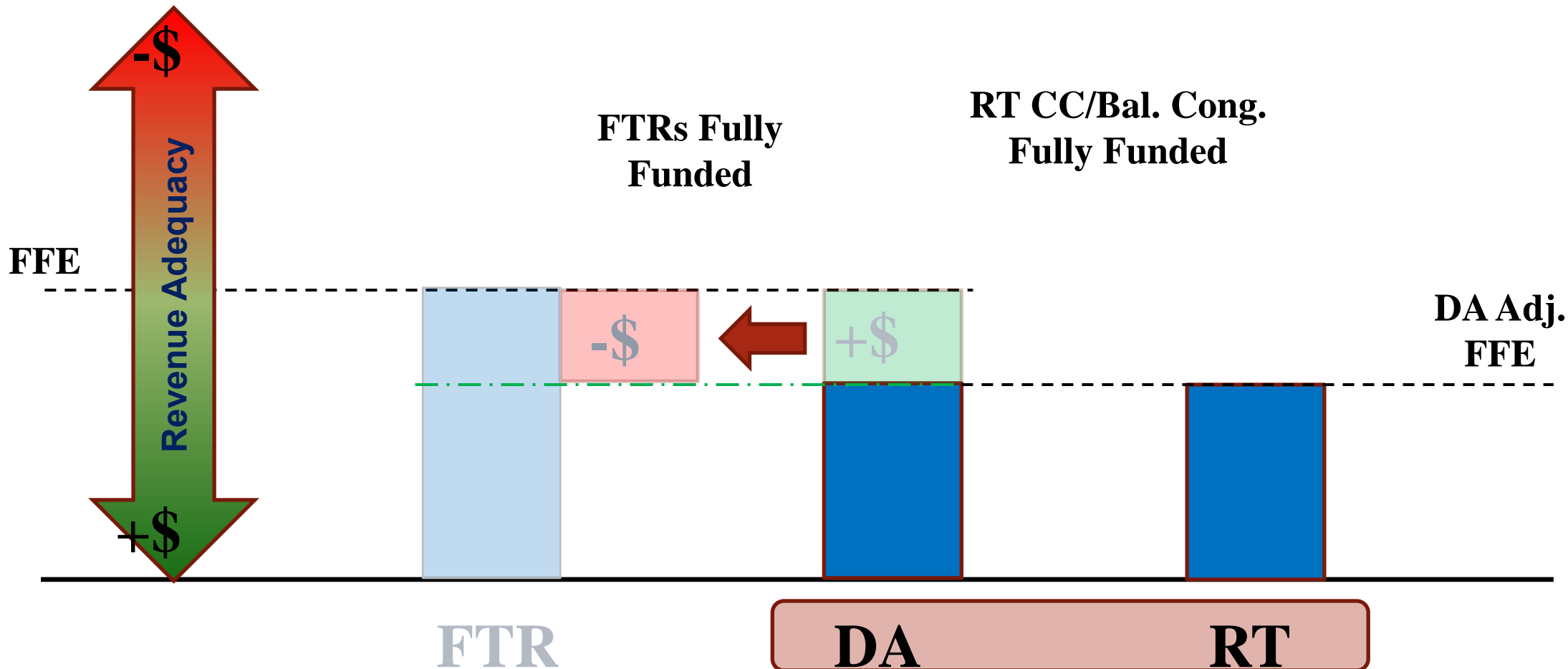
# Day-Ahead Firm Flow Entitlement Exchange Benefits



# M2M FG Exchange Examples – DA FG Exchange



# M2M FG Exchange Examples – DA FG Exchange



## Study Parameters

- Historic dates with high RT M2M exchange (MWs and/or \$)
- Limited topology differences between DA and RT markets
- Re-run PJM/MISO DA Markets with RT actual use for M2M Flowgates
- Capture incremental impacts/benefits
  - Overall PJM/MISO production costs
  - Cost for M2M exchanges/settlement (DA vs. RT)



## Total Production Costs Savings

- Range of \$1k-\$11k joint savings per day

## JOA savings associated with DA Shadow prices

- Range of \$5-\$15k joint savings per day

## General Observations

- Production costs tend to offset in between RTOs
- Benefits tend to favor the party requesting additional use

## **PJM & MISO recommend implementing processes to better align Day-Ahead flowgate use with Real-time expectations**

- Phase I (Prior to Q3 2015)
  - Implement DA FFE exchange for expected congested M2M flowgates
  - Settlement based upon DA FFE exchange and Shadow Prices
  - Exchanged FFE transfers to RT Market
- Phase II (Q3 2015)
  - Perform proof-of-concept for an economic allocation for use in the DA Market
  - Determine implementation viability, costs, & schedules (if applicable)
  - Determine necessary Tariff revisions (if applicable)

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# Questions