



Joint and Common Market

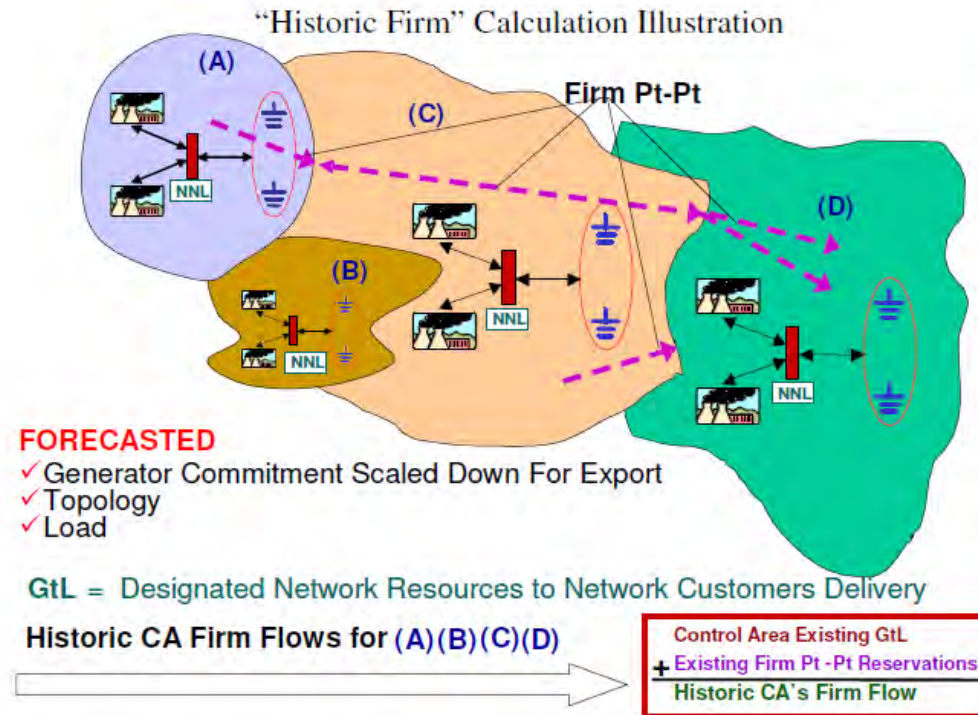
# 4. A - FIRM FLOW ENTITLEMENT (FFE) BASICS

# CMP BACKGROUND

- Traditional TLR Process
- Development of Market-Based Operating Entity and their expansion
  - Reduced Data and Loss of Granularity
- Congestion Management Process
  - Market Flows
  - Historic Firm Flows
  - Flowgate Allocations
  - Firm Flow Entitlements

# FLOWGATE ALLOCATIONS

- **Historic Firm Flows** are the Firm Flows that would have occurred if all Control Areas maintained their historic configuration and continued to serve their native load and import/export energy.
- **Flowgate Allocation** refers to splitting up the Flowgate capacity among all the impacting entities based on the Historic Firm Flows.



# FIRM FLOW ENTITLEMENTS (FFE)

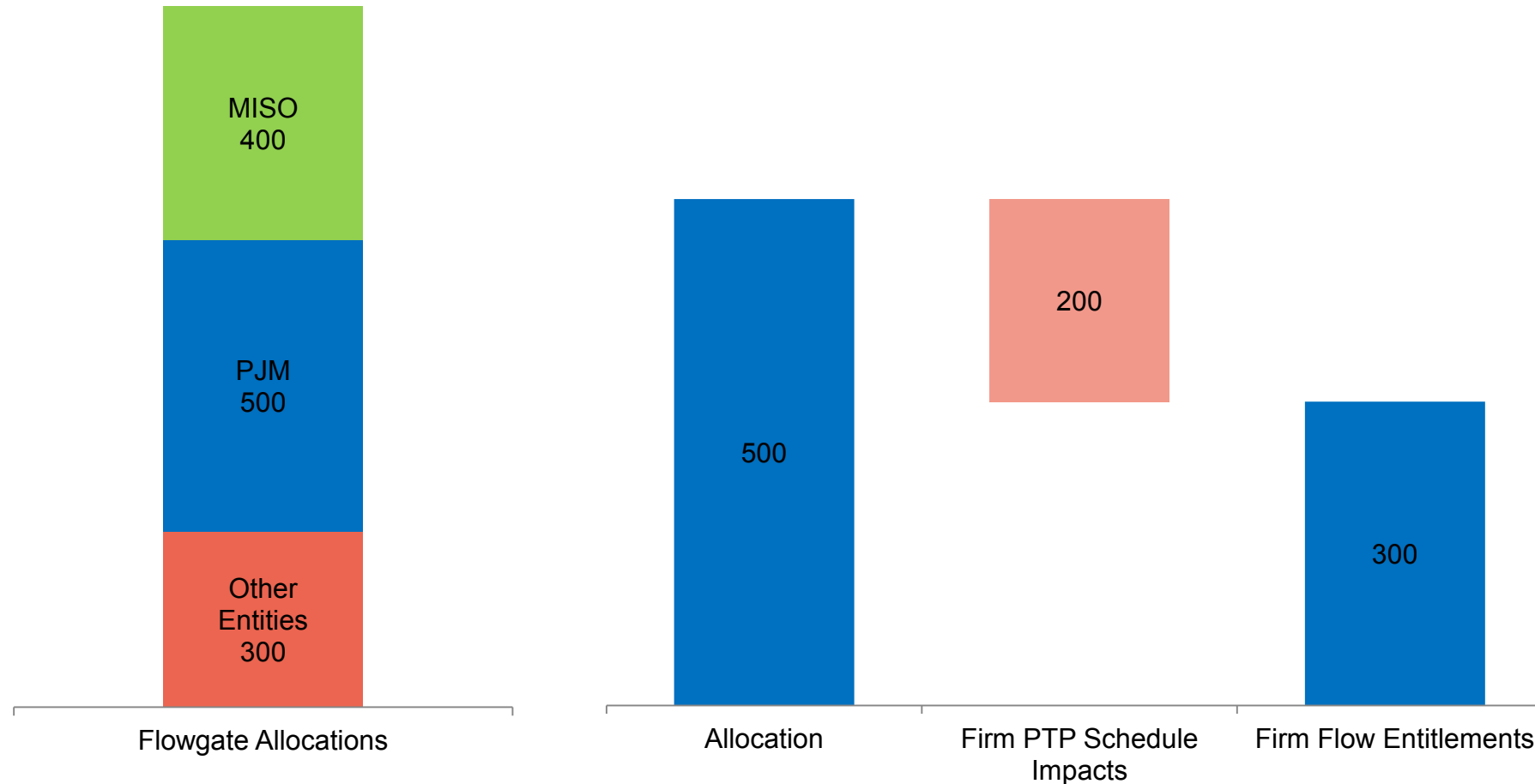
- Flowgate allocation reflects an entity's firm rights based on historical usage.
- Firm Flow Entitlements captures an entities entitled usage during congestion based on net scheduled use of transmission service.

Or

- Firm Flow Entitlements reflect firm limit on the net market flows that a market entity can have for a Reciprocal Flowgate.

# FFE – SIMPLIFIED\* EXAMPLE

Flowgate Rating = 1200



**\*Note: Actual calculation uses directional values. FFE is derived from a combination of forward and reverse allocations and flows.**

# FFE CALCULATIONS AND APPLICATIONS

- FFEs are calculated in Real-Time every 15 minutes using:
  - Daily Allocation values
  - Hourly Historical Gen-to-Load Impacts
  - Firm Schedule impacts
- 15 minute FFE values are integrated into Hourly FFE values and used in Market-to-Market (M2M) Settlements.
- FFEs are also used as limits in Forward Processes
  - Day-Ahead
  - FTR

# Questions



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