Energy Imbalance Market: Risk, Reward, and Costs

February 23, 2018
Now it's your time to join us!

Dad, I've told you a thousand times

Your long-winded explanation of the force does not make me want to join the dark side.

Energy Imbalance Market:
Risk, Reward, and Costs

February 23, 2018
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Southern Speaking
Southern Speaking

- MRSNAKES
- MRKNOT
- SAR, CMEDBDII’S
- LIB, MRSNAKES
Southern Speaking

- MRDUCKS
- MRKNOT
- SAR, CMWANGS
- LIB, MRDUCKS
Southern Speaking

- MRFARMERS
- MRKNOT
- SAR, CMMTPOCKETS
- LIB, MRFARMERS
Southern Speaking

- MRMICE
- MRKNOT
- SAR, CMEDBDFEET
- LIB, MRMICE
EVOLVING WESTERN GRID AND POWER FLOWS

Type 1: Exports out of California during late morning and afternoon hours (9 a.m. to 5 p.m.)
- Exports serve load in other BAAs, and reduce external generation

Type 2: Imports into California during morning (before 9 a.m.) and evening (after 5 p.m.)
- Imports reduce in-state generation and increase external generation

Source: CAISO OASIS.
Flexibility is Key when Energy Sources Are Unpredictable

Sources: Net load data available from http://www.caiso.com/informed/Pages/ManagingOversupply.aspx. Data on EIM transfers in Fifteen-Minute Market available from CAISO OASIS. All data was aggregated to hourly level.
ENERGY IMBALANCE MARKET & HYDROPOWER FLEXIBILITY

Question 1: How Do We Re-Think the Business?
Question 2: Optimized Energy or Broad Operating Capability?

77% of energy production and 99% of ancillary service capability from five plants:
Contact Info

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System Marginal Energy Component Price in the ISO Market