Uplift Downside

Harvard Electricity Policy Group
Stu Bresler
VP – Market Operations
PJM Interconnection, LLC
Categories of Uplift

- **Energy Market** – Day-Ahead and Balancing Operating Reserve
- **Financial Transmission Rights** – underfunding allocation
- **Demand Response** – LMP payments to DR providers
- **Ancillary Service Markets** – lost opportunity cost credits
PJM Deviations Balancing Operating Reserve Rates

- RTO BOR Deviations Rate
- East BOR Deviations Rate
- West BOR Deviations Rate

$/MWh of Deviations

Jan-10 to Mar-14
• Fairly Infrequent
• Largely the result of FERC Order 745
• Need I say more?
Detrimental Impacts of Uplift

- Non-transparent and unhedgeable costs
- Unquantifiable risk that impacts cost of serving load and/or financial trading
- Dilution of price signals as drivers of investment and innovation
Steps PJM Has Taken to Minimize Energy Uplift

• “Leaner” scheduling practices
  – Schedule fewer large units and rely more on CTs
  – Higher prices for short durations, less uplift
  – Local issues still may require running uneconomic generation

• Implemented “closed loop” interfaces

• Transmission upgrades
Pricing Solutions to Energy Market Uplift

• Allow more inflexible units to set LMP
  – Already done in PJM for CTs that are not dispatchable

• Model and bind the constraints these generators are running for in real-time and day-ahead
  – Likely closed-loop interfaces

• **Ensure these facilities are modeled appropriately in ARR Allocations and FTR Auctions**