

# Impact of Day-Ahead/Real-Time Bidding

- Implications for NYISO software
- market design (including verification)
- settlement process

# Implementing Day-Ahead Demand Bidding

- Neenan & Assoc. report due to NYISO BOD in late December
- Resolve outstanding issues in next 2-3 WG meetings (by January)
- Coordinate modifications to MIS/SCUC with IS and Operations personnel
- File tariff changes in March 2001
- Ready for day-ahead load bidding on 5/1/2001

# Day-Ahead Demand Bidding

- **Principle: loads actively participate in setting DAM LBMP**
- **Needs to tie in closely with MIS and SCUC software modifications:**
  - specifying load bids
  - treatment in day-ahead unit commitment

# Assumptions

- Incremental bid formulation (if LMBP falls below  $X\$/Mwhr$ , will purchase additional  $Y$  MW)
- Only firm load will be served when LBMP is  $> X\$/Mwhr$
- In the absence of demand bidding, firm plus  $Y$  increment would be served

# Supply/Demand Mix

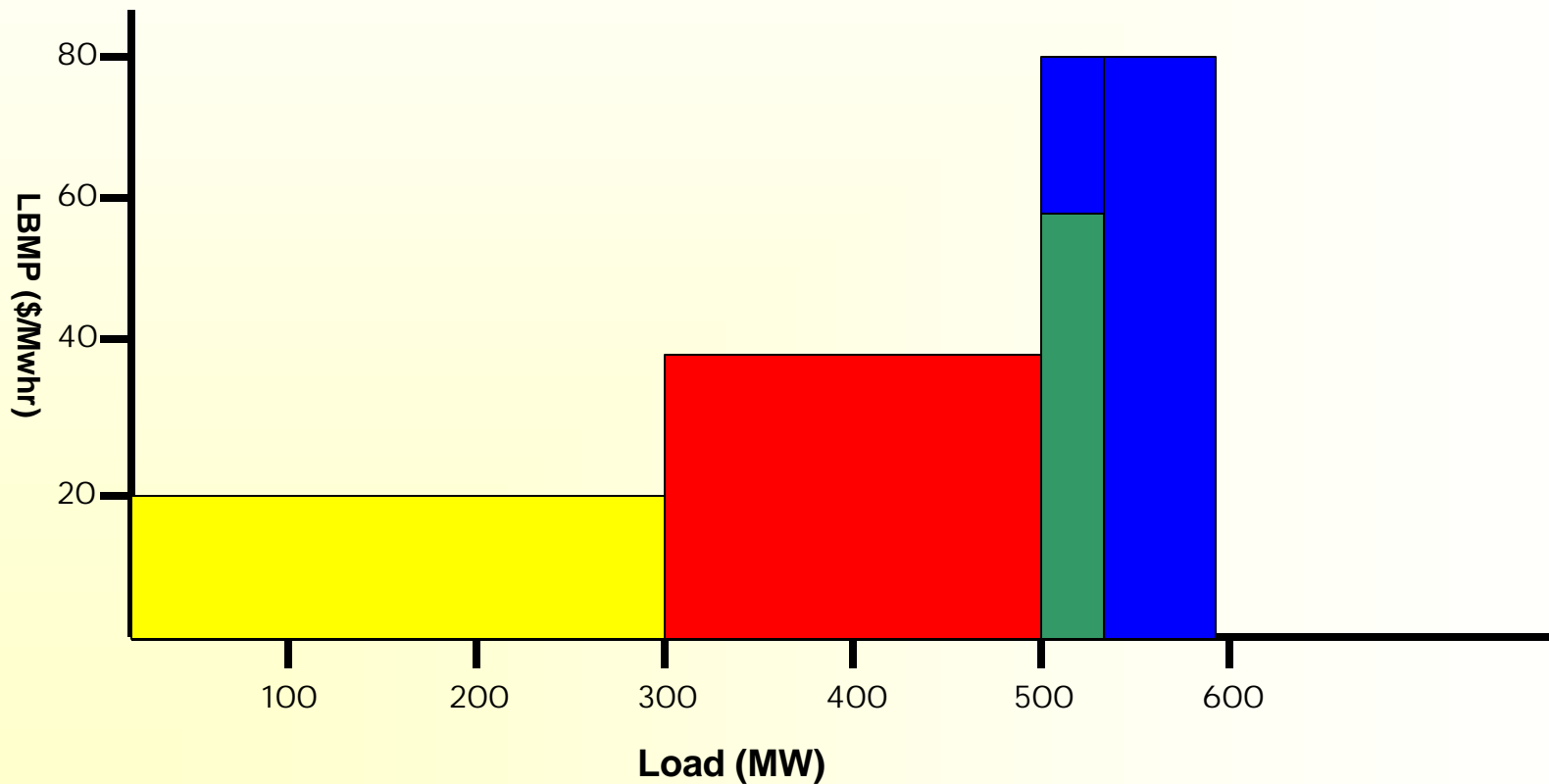
## *Generation profile*

MW	\$/Mwhr
300	20
200	40
50	80

## *Load profile*

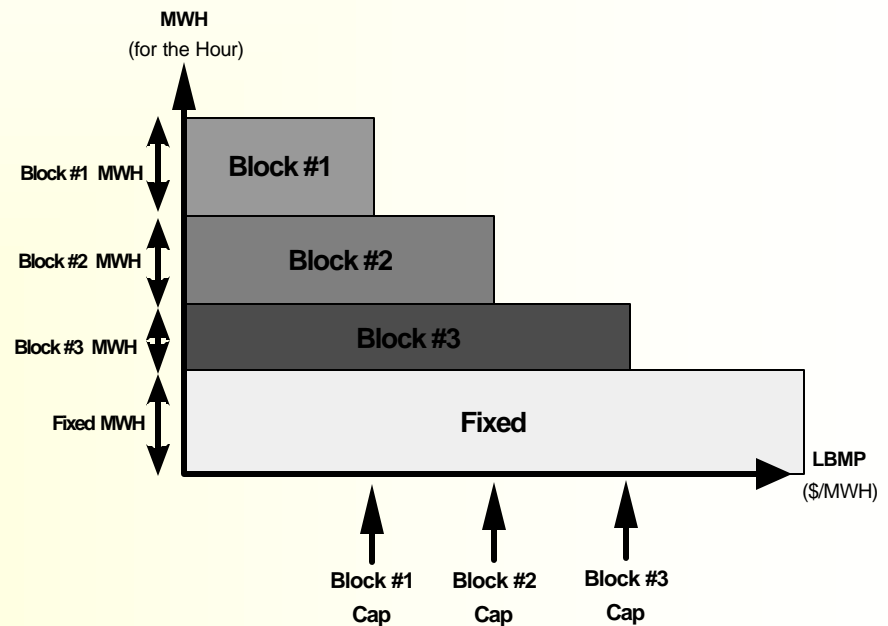
Firm	bid	\$/Mwhr
80	40	60

# How Loads Set LBMP



# Price-Capped Load Bids

- Submitted in Day-Ahead market
- Additional load purchased at lower LBMPs
- Load modeled on zonal basis in SCUC
- Implementation targeted for 5/1/2001

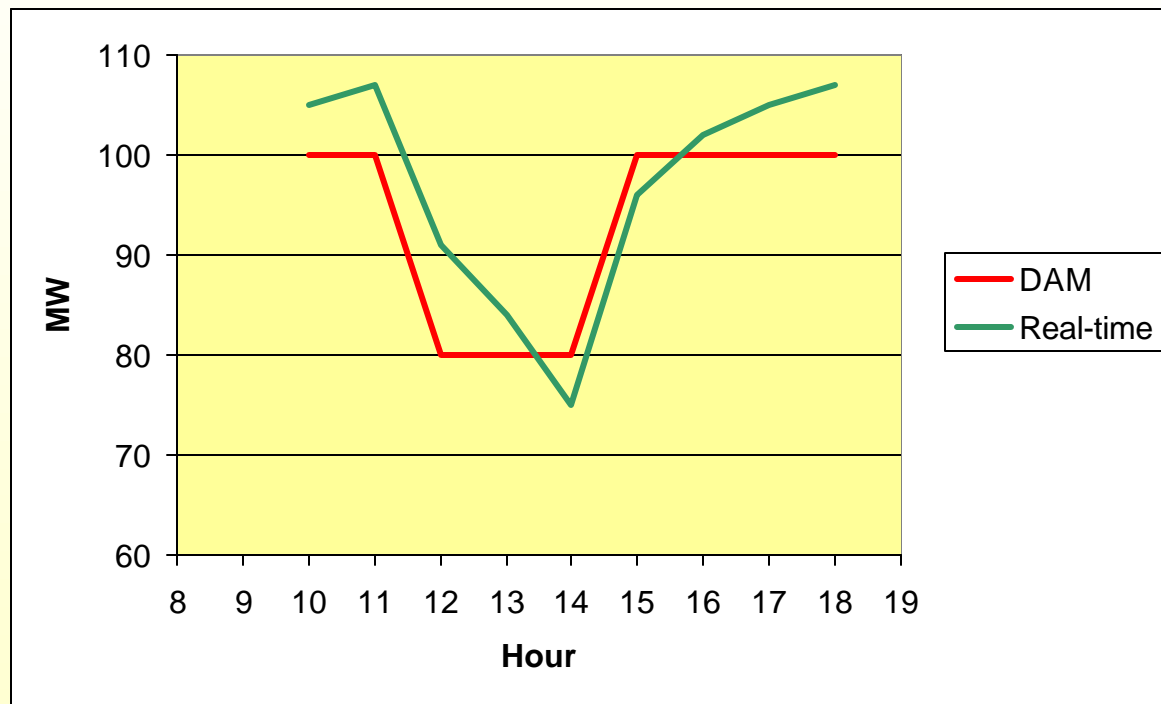


# Day-Ahead Demand Bidding Issues

- Bid format - up/down or as per price-capped load bid format?
- Paying DAM LBMP to successful bidders
- Recognizing minimum curtailment durations
- Verifying performance



# Verifying Performance



# Day-Ahead Demand Bidding Issues (cont'd)

- Allocating program costs to market
- Interacting with real-time market
- Impact of retail tariffs
- Enabling participation - how do we make it happen?

# Real-Time/BME Demand Bidding

- Technical implementation feasible via negative generator bid curve
- Response time is practical issue - DG vs. interruptible load
- Settlement may need to be based upon BME - not feasible for summer 2001
- What would be the effect of providing real-time price signals to LSEs?