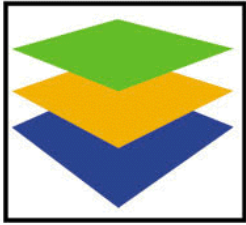




DADRP Recommendations

Presented to:
NYISO Price-Responsive Load Working Group
February 9, 2004

Presented by:
Neenan Associates



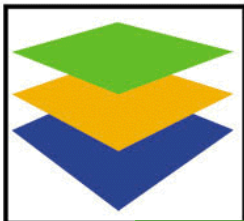
Objectives of DADRP

To increase competition in DAM

- **Reduced price volatility**
- **Reduced reliance on artificial market controls**

To increase competition in NY State's retail market

- **Create opportunities for customers to experience dynamic pricing**
- **Demonstrate the value of dynamic pricing**



Summary of DADRP Activity for 2003

- **Enrollment**

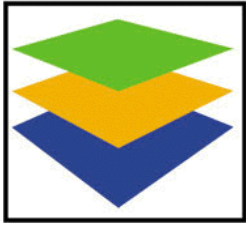
- Over 300 MW on the books
- 27 participants, including 3 new

- **Bidding**

- Few actually bid
- Too many at very low prices, non-critical periods

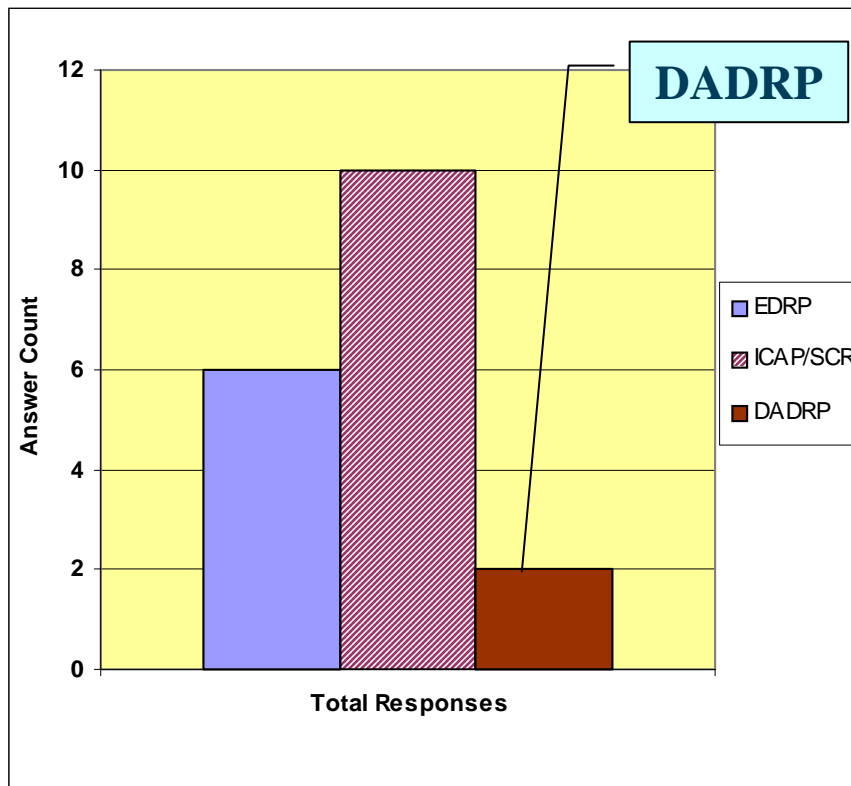
- **Scheduled**

- Max 15 MW in 2003
- Not much higher in 2002

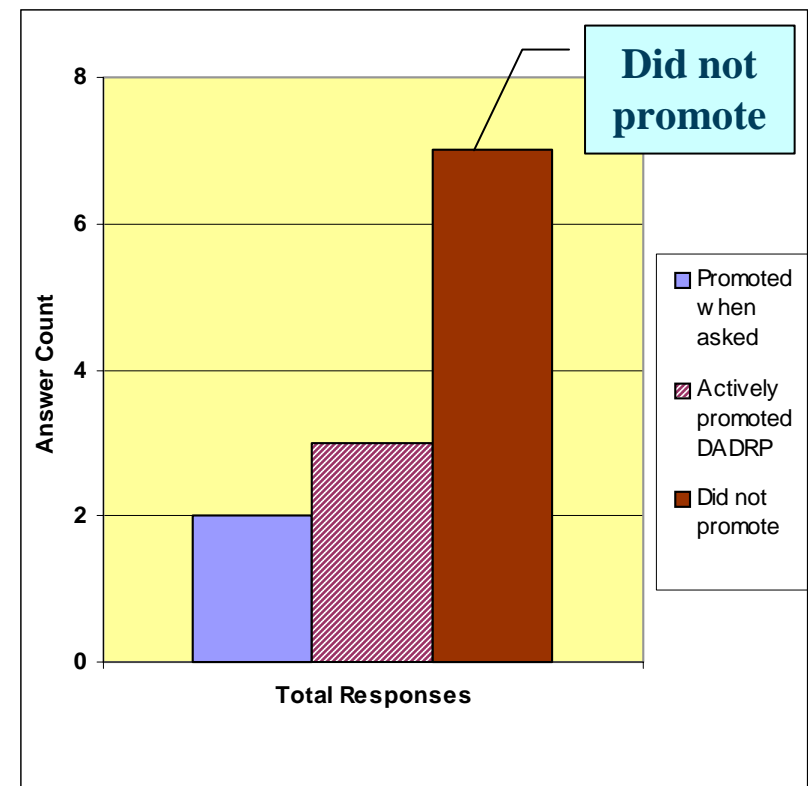


NYISO Survey of CSPs

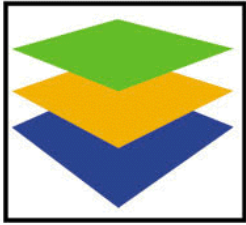
Which programs were promoted?



Efforts to promote DADRP



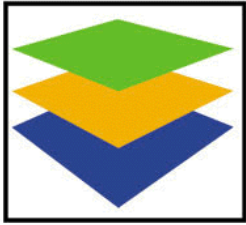
Barrier #1: Almost no one is actively promoting DADRP



Design Barriers to Promoting DADRP

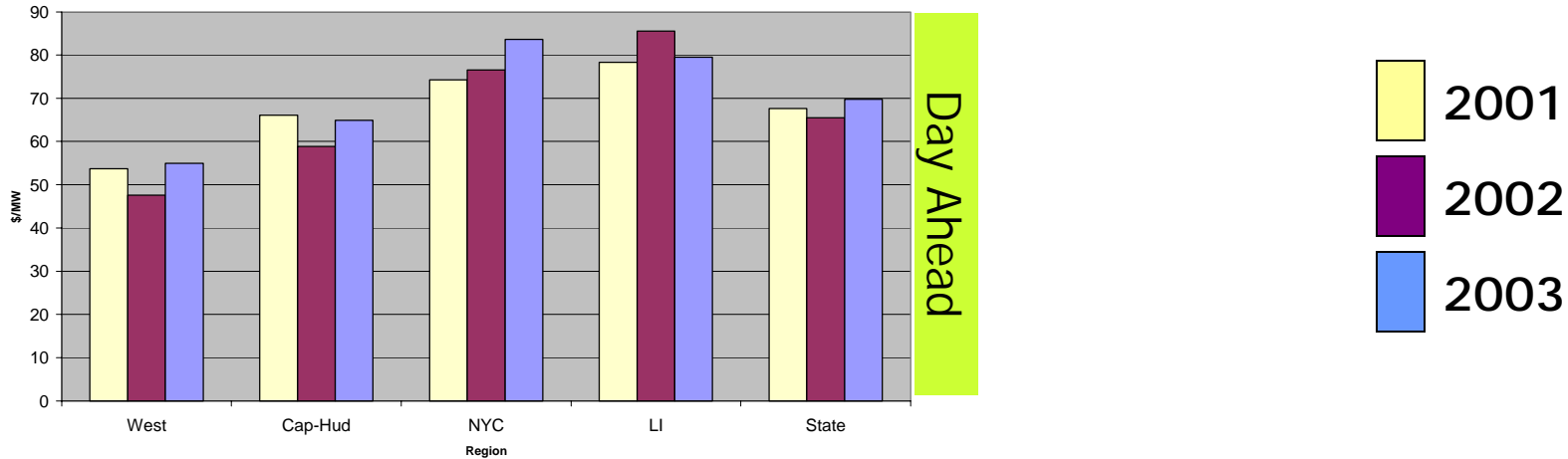
- Program uncertainty
- One MW minimum bid (but 100 KW increments thereafter)
- Limited bus availability
- Credit requirements for enrolling entity
- “Penalty” remains – higher of DAM or RT price
- Data must be submitted by a TO

Barrier #2: DADRP program design limiting promotion.



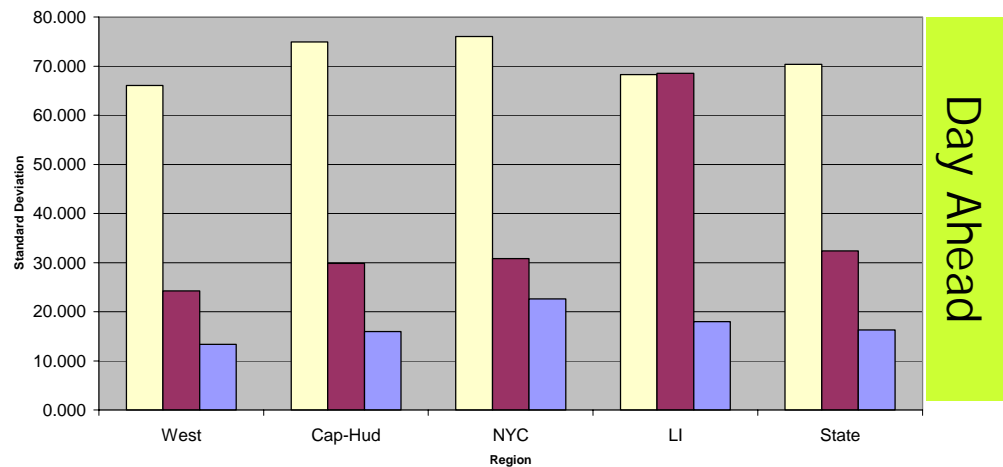
Summer NYISO DAM Prices

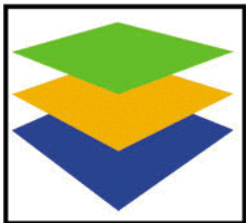
Day-Ahead Average Prices have increased



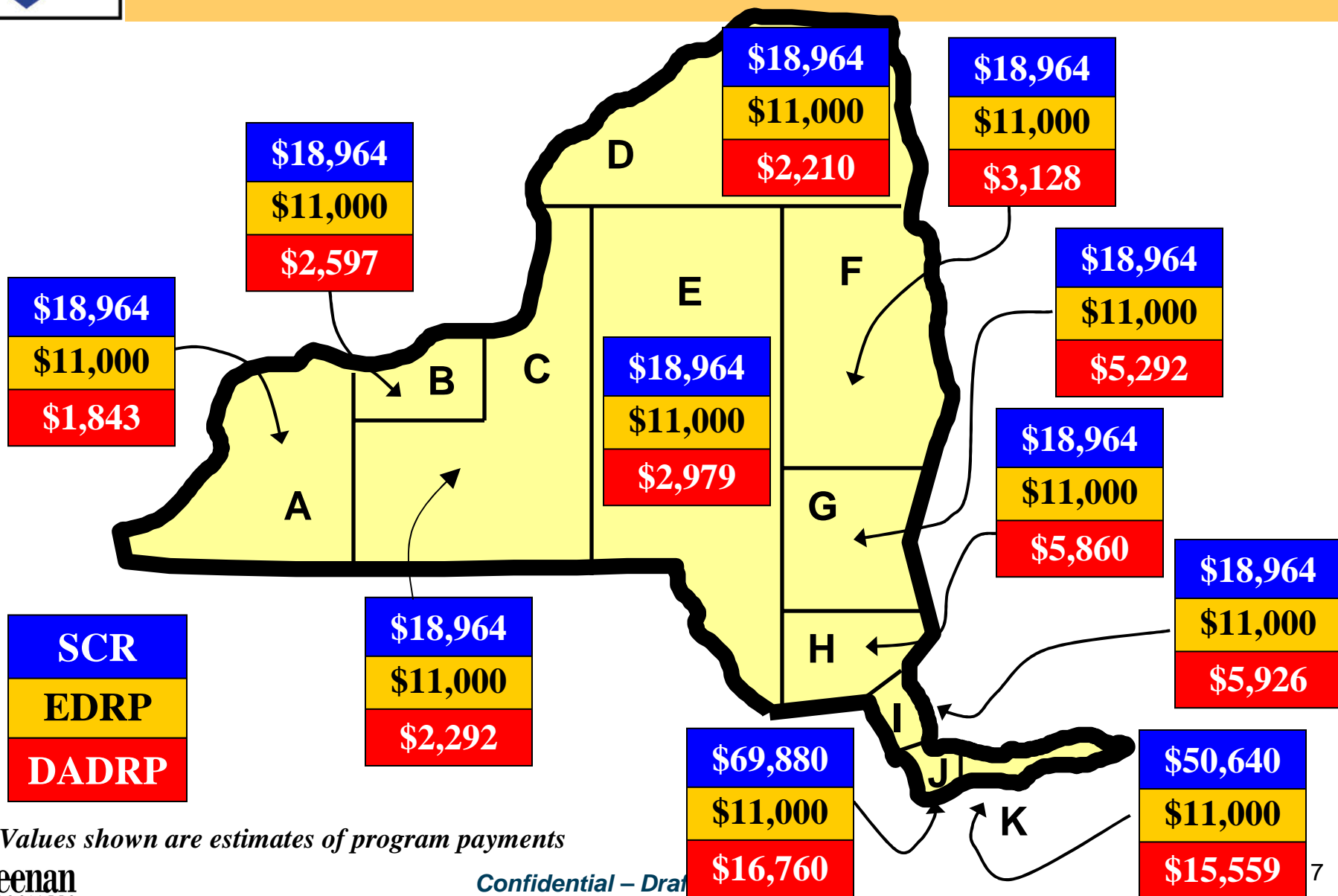
- Statewide average prices higher in 2003 in DAM, but volatility has been dramatically reduced

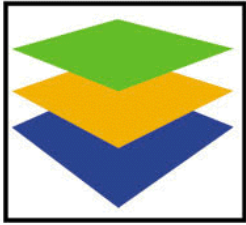
Day-Ahead Price Volatility has decreased





Value of 1 MW of Demand Response

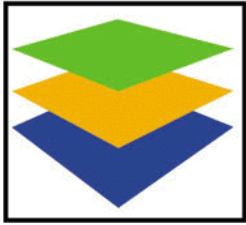




CSPs don't see value of DADRP

- ❑ **Lack of price volatility means fewer opportunities to be scheduled**
 - **CSPs think customers have high outage costs, therefore would need to bid high**
- ❑ **Value of 1 MW of DADRP is significantly lower than reliability programs**
- ❑ **CSPs can't recover up-front investment and customer acquisition costs of promoting DADRP**

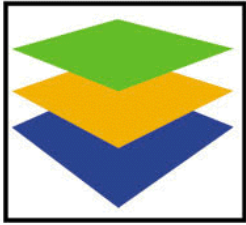
Barrier #3: Benefits don't outweigh costs for CSPs to develop infrastructure



Customers don't understand the market

- ❑ Enrollment in EDRP and SCR is steady, yet programs have shorter notice than DADRP and penalties in SCR can be much greater than benefits
- ❑ Most customers have demonstrated curtailment capabilities in reliability programs
- ❑ Customers are not market experts, but bidding requires market expertise
 - Evolving market structure
 - Characteristics of NYISO DAM prices
 - Use of non-linear and step-wise bidding provisions

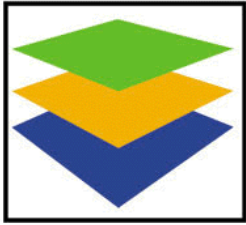
Barrier #4: Customers are unable to develop bid strategies



Current state of the DADRP program

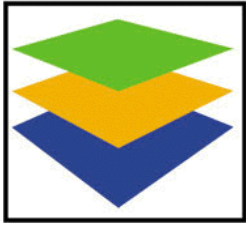
- Very little promotion by CSPs**
- CSPs don't see value to invest in infrastructure**
- Customers don't know how to bid and don't understand the market**
- Price volatility appears to have calmed down**

Why continue DADRP?



DADRP Provides Important Market Benefits

- ❑ **Tighter capacity and continued load growth forecasted for next few years**
- ❑ **Price Capped Load Bidding not backed up by actual load reductions**
- ❑ **Few retail RTP-type product initiatives**
- ❑ **Adequate amount of DADRP resources would serve as competition to generators**
 - **To restrain prices naturally**
 - **Would ultimately remove the need for bid caps**
- ❑ **DADRP has potential to make dramatic reductions high prices**
 - **With more reasonable goals for DADRP curtailments (Lesser of 5% of zonal load or 500 MW), the highest price seen in the summer of 2001 could have been cut by nearly a third.**



Customers need more help

Market Information and experience

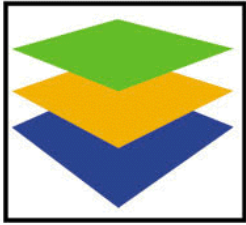
➤ **Training**

- **General market information**
- **Market trends (e.g., long-term price forecasts)**
- **Market simulations (e.g., Cornell)**

Support

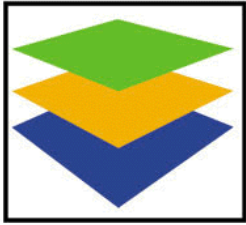
➤ **DR Audits**

- **Identify curtailable load**
- **Determine when load can be curtailed**
- **Estimate cost of load curtailment**
- **Develop bidding strategies**



DADRP “Super Aggregator”

- ❑ Single independent entity that acts as “Super Aggregator” for all interested LSEs, CSPs and Direct Customers
- ❑ Aggregator’s relationship with NYISO would be functionally identical to that of a CSP. However, the Aggregator would not compete with CSPs, would not market to end-users.
- ❑ Accepts bids from all comers on a non-discriminatory basis
- ❑ Creates infrastructure to facilitate mass aggregation of bids at standardized buses
- ❑ Addresses limitation on number of busses
- ❑ Addresses 1 MW minimum bid issue
- ❑ Simplifies bidding through standard bids
- ❑ Facilitates standing bids
- ❑ Allows CSPs to promote without burden of cost for developing DADRP “back office”



Example of Standardized DADRP Products

		Strip Strike Price		
		\$100	\$250	\$400
Strip Window	4 Hours <i>(1 p.m. – 5 p.m.)</i>	A	B	C
	8 Hours <i>(10 a.m. – 6 p.m.)</i>	D	E	F