

# Potential to avoid offer capping via the use of virtual bids

SPWG

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Monitoring Analytics

# Discussion

## **INCs and DECAs can directly affect the DA market price**

- **They can be marginal**
- **They can affect DA dispatch**
- **They can affect other participant positions (load, generation, FTR, etc)**



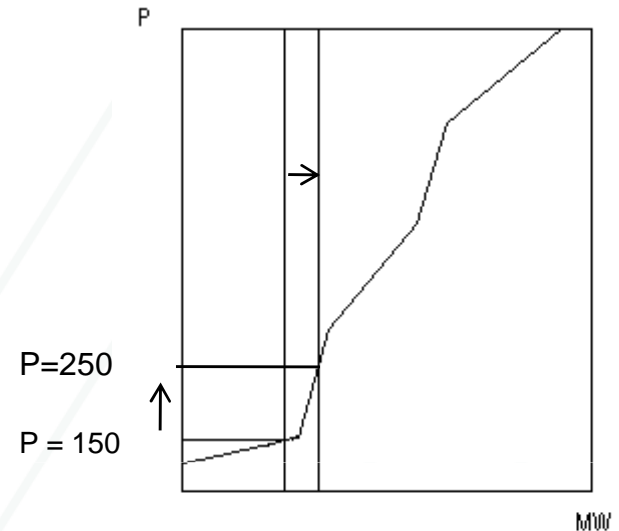
# MMU Concerns

- **In the context of the current market design and absent other positions, INC and DEC arbitrage incentives are consistent with market efficiency improvement**
- **The presence of other interests can create incentives counter to arbitrage**
- **Offer caps in excess of \$1,000 on INCs and DECAs could increase opportunities to exercise market power**



# MMU Concerns: Leveraging Generation

|                               |    |         |
|-------------------------------|----|---------|
| DA Base Price                 | \$ | 150     |
| DA Actual Price               | \$ | 250     |
| DA Price Delta                | \$ | 100     |
| DEC MW                        |    | -10     |
| RT Price                      | \$ | 150     |
| RT Delta to DA Base           | \$ | -       |
| RT Delta to DA Actual         | \$ | (100)   |
| Virtual Bid/offer profit/loss | \$ | (1,000) |



| DA Generation        | MW  | Price | MC  | Revenue | Cost   |
|----------------------|-----|-------|-----|---------|--------|
| DA Base Generation   | 500 | 150   | 150 | 75000   | 75000  |
| DA Actual Generation | 510 | 250   | 250 | 127500  | 127500 |

| RT Generation        | RT MW | RT Price | DA Price | DA MW | Revenue   | Cost     | Net       |
|----------------------|-------|----------|----------|-------|-----------|----------|-----------|
| RT Generation Output | 500   | \$150    | \$250    | 510   | \$127,500 | \$75,000 | \$52,500  |
| RT MW True Up        | -10   | \$150    | \$250    |       | (\$1,500) |          | (\$1,500) |
| Virtual Position     | 10    | \$150    | \$250    | -10   | (\$1,000) |          | (\$1,000) |
|                      |       |          |          |       | \$125,000 | \$75,000 | \$50,000  |