

Marketing Pricing Work Group

Options for Change to the Current Implementation of CAOR
February 2, 2005



- » At previous Market Pricing Working Group meeting, two options for change to CAOR were identified for further investigation
- » Option d) CAOR and the Automatic Resolution of Shortages via the DSO (no Manual Interventions)
- » Option e) Increase the Quantity of CAOR and the Automatic Resolution of Shortages via the DSO (no Manual Interventions)
 - » (i) Additional CAOR in both Pre-dispatch and Real-time
 - » (ii) Additional CAOR in Real-time only

- IESO staff is currently conducting the following simulations to assess the potential price impacts of the different options
 - Impacts of Option d)
- Simulate 5 minute unconstrained prices for the year 2004 using actual data (Offers /bids/demand values) with the following exception:
 - Assume no Manual OR reduction (full OR requirement used in all periods)
 - Allow simulation tool to automatically solve for shortages.
- Impacts of Option e)
- Simulate 5 minute unconstrained prices for the year 2004 using actual data (Offers /bids/demand values) with the following exception:
 - Add additional CAOR in real-time (as 30-minute reserve only).
 - Assume no Manual OR reduction (full OR requirement used in all periods)
 - Allow simulation tool to automatically solve for shortages.
 - Run several simulations with various CAOR quantities and prices

Results of MSP Analysis (Option d)

Table 3-1: Estimated Price Change from Allowing the DSO to Automatically Solve for a Reserve Shortage, January-October 2004

	Actual (Manual Use of Out-of-Market Reserve)				Allowing the DSO to Automatically Solve for the Reserve Shortage				Average Difference in Energy Price
	10N	10S	30R	ENGY	10N	10S	30R	ENGY	
January Averages	4.45	6.70	3.48	66.22	6.70	8.82	5.85	67.95	1.73
February Averages	2.35	4.54	2.25	52.74	2.40	4.59	2.37	52.78	0.04
March Averages	5.12	6.64	5.10	48.90	5.29	6.81	5.28	49.04	0.14
April Averages	9.41	10.93	8.80	45.92	9.73	11.24	9.14	46.18	0.26
May Averages	8.66	10.90	8.20	48.06	9.71	11.89	9.44	48.80	0.74
June Averages	3.96	5.92	3.78	46.69	4.39	6.34	4.28	46.90	0.33
July Averages	3.59	5.61	3.46	45.57	5.35	7.35	5.29	47.16	1.59
August Averages	0.88	3.27	0.87	43.51	0.89	3.27	0.89	43.51	0.00
September Averages	1.06	3.54	1.02	49.57	1.16	3.66	1.13	49.53	(0.04)*
October Averages**	0.54	2.29	0.54	49.11	0.54	2.99	0.54	49.11	0.00

Percentage of Time 30 Minute OR Price At or Above Threshold Price

Unconstrained Schedule

Price (\$)	RT Percentage	PD Percentage
20	4.96%	9.87%
30	2.81%	6.15%
50	0.07%	0.42%
70	0.03%	0.22%
100	0.03%	0.19%

Constrained Schedule

Price (\$)	RT Percentage	PD Percentage
20	12.21%	16.5%
30	9.40%	11.0%
50	1.17%	1.24%
70	0.93%	0.56%
100	0.83%	0.41%