Analyzing GT Performance in RT

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AGENDA

The agenda for today's presentation is:

- Show some randomly selected SCD intervals and the quantity of GT capacity that was over-counted in SCD in SCD relative to their actual generation
- Perform limited price recalculations to determine the impact of the overcounting
- Discuss issues and possible solutions

The table below shows the level of over-counting in SCD for randomly selected intervals on a couple of the peak days this summer. Units that were basepointed but had not yet started were not included in these numbers.

Interval	*Total Per Interval
7/29/2002 10:5	7 154.000
7/29/2002 11:1	2 110.000
7/29/2002 11:3	3 138.000
7/29/2002 11:4	9 152.000
7/29/2002 12:2	7 188.000
7/29/2002 12:4	6 221.000
7/29/2002 12:5	1 231.000
7/29/2002 13:4	7 220.000
7/29/2002 13:5	5 167.000
7/31/2002 13:4	6 111.000
7/31/2002 13:5	4 112.000
7/31/2002 14:4	90.000
7/31/2002 14:5	5 90.000
7/31/2002 15:0	0 89.000
7/31/2002 15:0	8 97.000
7/31/2002 15:1	88.000
7/31/2002 15:3	4 93.000
7/31/2002 17:5	2 70.000

^{*}Total is the sum of the differences between the Ideal BP and Actual BP whenever the Ideal BP is the same as the upper limit.

Price recalculations on these intervals resulted in:

- Eight out of 18 intervals having at least one congested area where the price in the congested area would have gone to the highest bid dispatched
- The maximum price increase observed was a statewide price increase of \$87 which was close to being limited by the highest available bids on the system
- Price changes were observed in the state as a whole and individually on LI, in NYC and within load pockets within NYC
- There were a number of intervals where prices did not change significantly either due to having many MWs of GTs not dispatched in the ideal dispatch at similar prices available to the redispatch or because the price was already at or near the highest dispatchable bid available to SCD.

There seem to be at least two critical issues that need to be resolved:

- How to model upper operating limits in pricing and scheduling that reflect units actual capabilities [Should this be a NYISO responsibility or the responsibility of the generation owner? How do we protect the market against bad actors?]
- How to model the MW of GTs that have received basepoints but which are not yet generating [Need to ensure that steam capacity is not being backed down in the final dispatch for MW on GTs that have not started generating yet]