



S & P Working Group

June 27, 2003

August 12, 2003

Scarcity Pricing Update

Persistent Dragging Update

Persistent Dragging

An accurate estimate of each generators' capacity enhances reliability of operation and results in prices that reflect the true state of the electric power system.

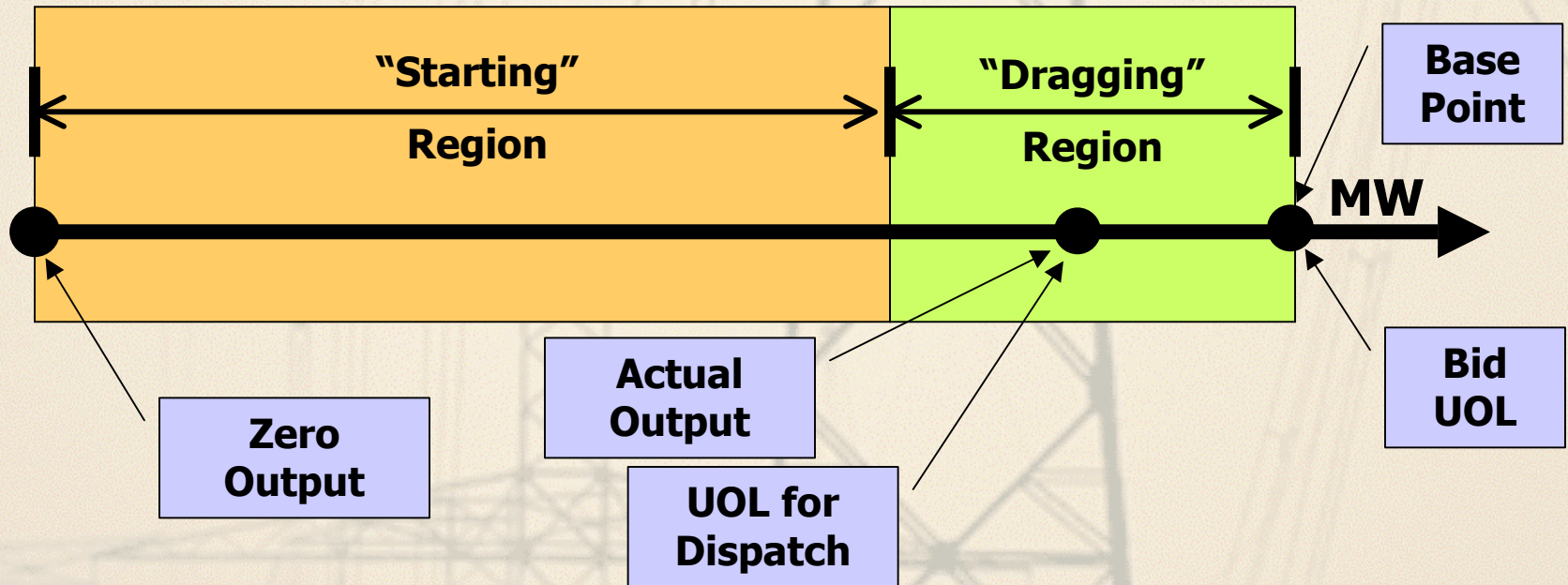
Gas turbine capability decreases as ambient temperature increases. On hot days there was no way (other than manual derates) to reflect the reduced capability of gas turbines in the dispatch.

We fixed this in SCD for gas turbines

Deployed & Enabled: 6/24/2003

Gas Turbines

- **Automatic detection of dragging in SCD**
- **Automatic compensation for dragging in SCD**
- **Automation at higher output levels only**



Otherwise

- New displays to monitor gas turbines
 - Distinguish between dragging and starting
- New displays to monitor other units
 - Monitor deviation between actual output and desired output
- Manual derate is required for SCD to “see” a reduced upper operating limit

Hour-Ahead

- A generator must be derated manually for BME to “see” a reduced upper operating limit.
 - Gas turbines within the “derate” region
 - Gas turbines within the “startup” region
 - Non-gas turbines (steam, combined-cycle, nuclear, hydro, etc.)

Under Generation Penalties

- UOL is not automatically reduced to actual
- Dispatch logic sees the actual as UOL
- Settlements still sees bid UOL as upper limit
- Penalties are therefore applied when divergence exceeds undergen limits

Who's doing what to who?

- Some MPs unable to accurately assess UOL
 - DAM bidding forecast is 2 days in advance
- UOL derates on DAM schedule requires a call and action by ISO operator
- Some ISO operators mistakenly said that new SW was handling the derate – it isn't
- Recommending forgiving penalties to GT's since June 24th.
- Problem of “manual derate overload” for operators is likely during heavy load periods

What to do going forward?

- Units without DAM schedules are not a problem. MPs can update UOL in-day.
- ISO forgive undergen penalties since 6/24 for all GTs given the confusion on derate practice.

What to do going forward?

LEGACY

- Do not penalize (undergen) units scheduled in DAM.
- Require MPs to appropriately derate all units not scheduled in DAM. No call in is normally required, derates can be done through the bid pages on-line.
 - SMD2
- ISO to ensure that RTS software and rules automate the process as much as possible.

What to do going forward?

ISO ACTION

- Issue a technical bulletin ASAP that clearly describes the rules and expected results.