



Excerpt from the Mcilvaine Gold Dust: The "Air Pollution Management" Newsletter  
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## Industry News: Optimization is the Way to Meet the CSAPR Rule Mcilvaine Hot Topic Hour: November 10, 2011

During a Mcilvaine Hot Topic Hour webcast, Peter Spinney addressed opportunities on ways to use optimization to meet the Cross State Air Pollution Rule (CSAPR). He explained how BoilerOpt® can improve overall unit performance, reduce NOx and increase boiler reliability which results in few adverse consequences associated with low-NOx operations, including less slagging, water wall corrosion, ammonia slip and air heater fouling.

Below are some CSAPR compliance alternatives:

- De-rate Units
  - *Live with reduced revenue and increased cost for less efficient gas –fired generation*
- Change Fuels
- Stage deeper with LNBs and OFA
  - *Live with more erosion, tube leaks and slagging*
- Run SCRs and/or SNCRs harder
  - *Live with reagents costs, slips, plume and pluggage*
- Optimizer boilers
  - *Reduced and less variable boiler NOX*
  - *Deeper staging with less slagging and corrosion*
  - *Greater removal from SCRs/SNCRs with fewer side-effects*
- Minimize capital commitments for CSAPR while emerging regulatory changes make clear which units can survive and which cannot
- Inform future capital decisions for surviving units with better understanding of true (optimal) baseline performance
- Better equip surviving units to cope with:
  - *Greater demands on existing emissions control hardware*
  - *Process changes and variable costs for new emissions hardware*
  - *Operational profiles associated with fundamentally altered markets*
- Influx of renewable with intermittent generation output profiles
- Reduced capacity factor due to more efficient new capacity coming on-line
- Problems associated with aging assets and changes from design conditions
- Greater operational challenges with fewer skilled operators and engineers
- Ever-greater needs to "push the envelope" in order to "stay in the money"

For more information on the recording, visit <http://www.mcilvainecompany.com/>

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