Is there a future for base load generation? Please respond to the poll?

System operators have recently seen something rather new – SBG – or "Surplus Baseload Generation". This is due to falling demand related to the current economic situation and a newer phenomenon; the displacement of base load by variable load renewable generation.

With governments everywhere and the public strongly supporting new renewable generation, primarily wind and solar; these forms of variable generation are displacing base load by being must run when the resource is available. So the question is "Is there a future for base load generation?". Please respond to the poll at the bottom of this blog entry

This issue was addressed at last week's Association of Power Producers of Ontario (APPrO) annual conference where a session was dedicated to this new phenomenon. The following shows the amount of time Ontario experienced SBG over the past 18 months. Excess generation of well over 1,000 MW was experienced! This resulted in shutting down low marginal cost nuclear plant as well as spilling water at hydro plants. The 18-month forecast by the IESO in Ontario expects SBG to continue to be an issue going forward.

Surplus Base load Generation



IESO Presentation to APPrO 2009

The variability of the wind is shown in the following chart illustrating how two days in a row the wind at the same time varied from 989 MW to 7 MW on the following day.

Wind Capacity on Consecutive Days



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So what does this all mean? In the smart systems of the future is the concept of large scale base load generation doomed? Do you have to be able to manoeuvre to survive? Or will policies change to ensure that low cost base load generation is not displaced for higher cost alternatives?

This is just the beginning of the discussion for this subject. Please answer the following simple poll. I would like to get your views. More work is needed on this issue as we plan the systems of the future.

[polldaddy poll=2259325]