From: Anderson, David M

Sent: Wednesday, April 22, 2009 1:19 PM **To:** Hendrickson, Paul L; Warwick, Mike

Cc: Cort, Katherine A; Cabe, James E; Niemeyer, Michelle; Scott, Michael J

Subject: RE: ERCOT Meeting

The ERCOT meeting was very helpful to those attending. Warren Lasher facilitated the meeting at the Austin-Metro Center Office. He provided several electronic documents, which have subsequently been uploaded to EARRTH under the NFP Ology site. What follows is a brief summary of the highlights from my notes:

- ERCOT has only been in the forecasting business for the last 5 years, so there is no track record prior to that time.
- They rely an IEEE load forecasting group to provide peer review of their forecasts, which would indicate some level of independent review is occurring.
- They are abandoning the current forecasting assumption that demand was independent from price all future forecasts will incorporate this growing dependency.
- Wind has become a very disruptive resource in Texas. They are currently under state mandate to bring 18GW of wind capacity online as soon as the transmission system can be built linking west Texas with east Texas. At those levels of capacity, when the wind is blowing, baseload capacity is displaced. The wind is "must-take" for renewable portfolio standards reasons, and it is so heavily subsidized that consumers can be paid to take it (negative priced). Because ERCOT is not connected to other regions (and it is political heresy to even suggest interconnection, beyond the prohibitive transmission construction costs) there is nowhere to sell the power from displaced baseload generation. No solution currently exists, but political action may address this soon.
- Nodal pricing continues to get pushed back (in time) for implementation, and is
 now not envisioned until late 2010 at the earliest. PUC is backing the move to
 TOD pricing on the retail side. The nodal market will alter existing bilateral
 contracts to provide "allowances for differences", where each party is
 compensated when prices favor one or the other parties.
- The PUC is envisioning "security constrained economic dispatch" as a potential approach to protect nuclear baseload generation under nodal pricing.
- Grid storage is an area of growing concern for ERCOT, given the disruptiveness
 of wind. Reliable grid-connected storage technologies need to mature quickly to
 alleviate some anticipated consequences of the combination of nodal pricing and
 wind capacity.
- Generation retirements are reviewed in a 90-day window by ERCOT for reliability impacts, prior to any plant being permitted to shutdown, mothball, etc.
- DSM is considered in the reliability forecasts in 3 stages or cases. 1) no consideration at all; 2) incorporate indices to account for DSM currently only distribution is regulated, and therefore mandated to account for DSM; 3) in the future, customers will be price-responsive and have load-shedding technology on the customer side.

Voluminous documentation was provided that obviously covers more detail than I can present or have recorded, for those interested. All of that electronic material has been uploaded to the EARRTH site.

Dave Anderson

Senior Research Economist
Pacific Northwest National Laboratory

From: Hendrickson, Paul L

Sent: Wednesday, April 22, 2009 10:18 AM **To:** Anderson, David M; Warwick, Mike

Subject: ERCOT Meeting

Dave - Did anything come out of the ERCOT meeting last week that would help Mike in the Ch. 8 ESRP updates? When convenient, please send me a few sentences about the meeting that I can use in my April monthly report for the ESRP update task.

Mike - I'm assuming you are working on the next revision of the Ch. 8 ESRPs reflecting the 2/18/09 NFP meeting held in Richland. If you need anything from me, let me know.

Paul