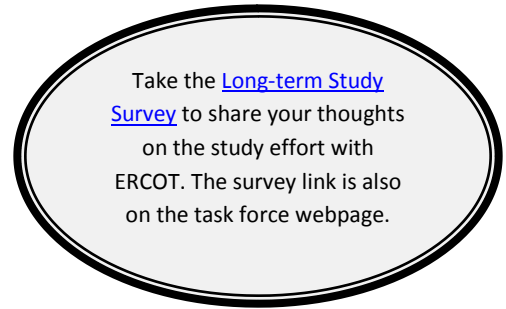


LONG TERM STUDY TASK FORCE MEETING NOTES – JULY 23, 2010

Agenda:

- Antitrust Admonition
- Introductions / Overview
- Market Factors: Fuels Discussion
- Water Demand Projections for Power Generation in Texas
- Update on New Technologies Analysis
- Review Influence Diagram
- Discuss August 20 Meeting Agenda



Market Factors – Fuels Discussion – J. Katheiser & K. Hanson

ERCOT gave a presentation on the impact of fuels. The presentation is available on the LTS Task Force meeting page, <http://www.ercot.com/calendar/2010/07/20100723-LTS>.

Comments/Questions:

- How accurate are the reserve level numbers for individual countries?
 - Reserve levels have been up and down. Numbers we are using are based on historical trends.
- Texas lignite mines are included in the Texas reserve estimate.
- What would the cost have to be to make it desirable to open up the east Texas coal reserves?
 - We are looking at that but don't have numbers yet.
- This is an extensive study, is ERCOT trying to build a model by yourselves?
 - No, this is showing how these markets are intertwined and that there will be some sort of relationship in the scenarios.
- Is ERCOT taking the lead on the initial proposed scenarios?
 - Yes.
- Are fuel prices going to be developed?
 - ERCOT and the Scenario Development Working Group will develop different scenarios with different fuel prices.
- DOE recommends you use widely accessible and available fuel pricing scenarios from EIA for example. This gives greater creditability to the scenario.
 - Should also consider our focus is Texas and the nationwide numbers may not be focused on Texas.
- Similarly, forecasts should be based on publicly available forecasts but then explain if we vary from those forecasts. Documentation and feasibility of the forecast will be important.
- It is important that all three studies have similar fuel assumptions. EIA has information that will be defensible.

Discuss the August 20 Meeting Agenda:

The presentation is available on the LTS Task Force meeting page, <http://www.ercot.com/calendar/2010/07/20100723-LTS>. The focus of the meeting will be on load

LONG TERM STUDY TASK FORCE MEETING NOTES – JULY 23, 2010

impacts. In addition, topics for the remaining meetings were reviewed and the tentative schedule is in the presentation.

The goal is to have scenarios developed by the December meeting. To do this, a **Scenario Development Working Group** will be created and hold more focused and detailed discussions. To join this group, send an email to longtermstudy@ercot.com. The first meeting will be on August 10, 2010 and will be held via WebEx. The meeting page for this group is <http://www.ercot.com/committees/other/lts/sdwg/index>. The goal is for the working group is to define what variables, then input parameters to build out the scenarios. A status report for this group will be provided to the LTS Task Force meetings.

Water Demand and Projections for Power Generation in Texas:

Stuart Novell of the Texas Water Development Board gave a presentation on Water Demand for power generation. His presentation is available at <http://www.ercot.com/calendar/2010/07/20100723-LTS>.

Comments/Questions:

- What about climate change in Texas?
 - We are looking at how to incorporate the global climate models down to a state and regional level. We would be more than happy to share the information we have.
- What about water desalination?
 - We have it in our planning, but it is very expensive compared to other options.
- Are the Texas planning areas constrained by the availability of water in the long term?
 - Approximately 60%-70% will have constraints by 2020. Most with have shortages beyond 2020.
- Were sub-surface water sources included?
 - It was included if it was a strategy in the planning area. But for the most part, no.
- Will we see regulation?
 - TWBD does not regulate, so my knowledge is limited.
- Did you find anything that was not environmental feasible? For example, lack of water.
 - It depends on the specific location. There are instances where the supply could be constrained.

Emerging Technology Analysis:

The presentation is available on the LTS Task Force meeting page, <http://www.ercot.com/calendar/2010/07/20100723-LTS>. The list of technologies as of July 23 is included in the presentation. Please send information for additional technologies that may affect Texas in the next 20 years or more to longtermstudy@ercot.com.

Comments/Questions:

- You may consider adding voltage management at the distribution level (EPRI Green), thermal energy storage, and concentrated solar.
- Should there be a group for measurement and verification technologies?

LONG TERM STUDY TASK FORCE MEETING NOTES – JULY 23, 2010

- Go to published sources rather than just the ERCOT planning group. You will want to source these numbers. DOE can provide you some of this information.
- Provide a compendium of source documentation will be critical.

Influence Diagram:

This topic has been moved to the August 10th Scenario Sub-Group meeting. The Influence Diagram will be used to identify which variables will become the basis for scenarios.

Communication:

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To sign up for the “longtermstudy” email distribution list – go to <http://lists.ercot.com>.

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Attendees:

Name – In Person Attendees	Company/Agency
Doug Murray	ERCOT
Blake Williams	CPS Energy
David Milner	CPS Energy
Michael Juricek	ONCOR
Manuel Munoz	Center Point Energy
Mike Lee	PUCT
April Pinkston	ONCOR
Manho Joung	LCRA
Paul Hassink	AEPSC
Jenell Katheiser	ERCOT
Alison Silverstein	DOE – LBL
Pat Wilkins	Tres Amigas
John Schnagl	U.S. DOE
Dana Showalter	ERCOT
Marguerite Wagner	PSEG TX
Julie Wicker	TPWD
Eddy Trevino	SECO
Steve Isser	Good Company
Peter Son	E. On
David Power	Public Citizen
Bob Lane	Luminant
Jay Tonne	TCEQ
John Moore	Stratus Energy
Wayne Kemper	Center Point Energy
Roger Stewart	LCRA
Ramon Sanchez	Public Citizen
Warren Lasher	ERCOT
Dan Woodfin	ERCOT
Kevin Hanson	ERCOT
Cathy Cioffi	ERCOT
Stuart Norvell	Texas Water Development Bd
Name – WebEx Attendees	Company/Agency
Steven Oltmanns	General Electric
Hong Xiao	ERCOT
Adan Martinez	General Land Office
Terri Gallup	AEP
Mike Grimes	Horizon
Paul Barham	CPS Energy
Paul Wattles	ERCOT
Monica Taba	FERC
Chris Jones	Duke Energy
John Moore	STEC
Ramya Nagarajan	ERCOT