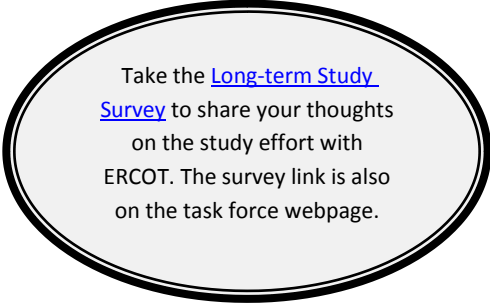


## LONG TERM STUDY MEETING NOTES: JUNE 18, 2010

### Agenda

- ERCOT admonition
- Introductions / Overview
- Review Results of Issue Boards
- Introduction to Influence Diagrams
- Influence Diagram Development
- Discuss July 23 meeting agenda



Take the [Long-term Study Survey](#) to share your thoughts on the study effort with ERCOT. The survey link is also on the task force webpage.

### Overview of the Project

The meeting began with a review of the objectives and goals of the Long Term Study Task Force and the long-range planning issues and a brief discussion of work underway and the data that is being collected.

### Questions/Actions Raised by Meeting Participants:

- Will we be looking at tools to evaluate ancillary services needs.
- Is ERCOT looking at incorporating energy efficiency and demand response into the load forecast analysis?
- What about public data?
- Will we be doing benchmarking of data?
- How do we create parity between existing and new technologies?
- We need to get more participation from new technology representatives, but will generation technology representative want to share business sensitive information?
- Can the Commission help?
- We should consider revisions to NERC standards and cumulative impacts of EPA standards.
- We should include the impact of generation retirement.
- The price of demand curves will be difficult to develop.
- The market may not pick up on the best ideas.
- We should include possible legislative impacts
- We should evaluate impacts of community cooling projects.
- Should we evaluate technologies that do not fit the market or regulatory structures? Yes, however developing recommendations to change regulatory structure is outside of study scope.

### Discussion of the makeup of the task force:

- Getting a broad sector of involvement and participation is critical.
- We are making progress getting new stakeholder involvement, but need to do more.
- It was noted that there are different people at this task force that are not part of the RPG.
- It was suggested that we should increase involvement of generation market segment

### Discussion of Scenarios and analysis:

- Is the goal to try and come up with what the world will look like? No study can define what will happen 20 years from now.
- We do want to develop potential scenarios that are based on consistent assumptions. This will help us analyze the cumulative impacts of scenarios and the key underlying factors.
- We need to understand the interrelationships between the assumptions and the scenarios.

## LONG TERM STUDY MEETING NOTES: JUNE 18, 2010

### Review Results of Issues Boards developed at May 21<sup>st</sup> LTSTF

Results of the brainstorming session from May 21, 2010 were discussed to provide additional information/clarification. An updated file can be found on the June 18<sup>th</sup> LTSTF meeting page in the key documents section.

### Influence Diagram Introduction

Introduction of an influence diagram was given covering the purpose, the process and expectations. The introduction included a sample influence diagram to help explain the process that will be used.

### Begin development of influence diagram

The goal of this exercise was to begin to identify the fundamental drivers for this project. A list of topics is included with these notes. The diagram can be found on the June 18th LTSTF meeting page in the key documents section. Some items that did not have an obvious home on the influence diagram were placed in a parking lot for review and future discussion.

- Transmission Planning
  - Load
    - Water Availability
    - Wildlife Habitat
    - Demand Response
    - Energy Efficiency
      - Building Code
    - Storage
    - Economics
    - Building Code
    - Data Centers
    - Population Demographics
      - Water Availability
      - Data Centers
      - Roadway and Transit Infrastructure
  - Policy
    - Building Code
    - Economic Criteria
    - Reliability Criteria
    - Transmission Technology
    - Storage
    - Transmission Siting
      - Land Owner Issues
  - Generation
    - Economics
      - Market Design
      - Fuel Type
      - Capacity Cost

## LONG TERM STUDY MEETING NOTES: JUNE 18, 2010

- Exchange Rate
- World markets
- Rates
  - Interest
  - Exchange
  - Tax
  - Inflation
- Emission limits
- Green Tech
- Fuel Prices
  - Natural Gas Prices
  - Carbon legislation
- Policy
- Water Availability
- Wildlife Habitat
- Emission controls
- Demand Response
- Storage
- Location (Siting)
- Type of Generation
  - Fuel Prices
  - Existing
  - Emerging
  - Obscure
- Smart Grid
- Plug-In Vehicles
- Operational Reliability
  - Generation
  - Load
  - Smart Grid
  - DSM/Demand Response
  - Import/Exports
  - Transmission Planning
  - Security
- Policy
  - Fuel Risk
  - Risk influencing technology
  - Tech choices influences consumers
  - Product and service innovation
- Policies with net metering
  - Distribution Generation
    - Technology
- Disruptive events
  - Reliability

## LONG TERM STUDY MEETING NOTES: JUNE 18, 2010

- Policy
- Operational Reliability
- Weather/Natural Disasters
- Building Technologies
  - Load
  - Economy
- Market prices
  - Load
  - Generation
  - Operational Reliability

### July 23, 2010 Meeting Agenda (tentative):

- Market factors: Fuels discussion
- New Technologies
- Presentation from TX Water Development Board on Water Demand and Power Generation
- Expand/Review Influence Diagrams

### Communication

Website: <http://www.ercot.com/committees/other/lts/>

Phone: 512-248-3152

Email: [longtermstudy@ercot.com](mailto:longtermstudy@ercot.com)

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

**LONG TERM STUDY MEETING NOTES: JUNE 18, 2010**

Attendees:

In Person:	Milton Holloway	CCET
	Lynne LeMon	Railroad Commission
	Stuart Norvell	Texas Water Development Board
	John Schnagl	U.S. DOE
	Michael Macias	ETT
	Marguerite Wagner	PSEG TX
	Brad Schwarz	E. On
	Angela Hughes	HOTCOG
	Walter Reid	Wind Coalition
	Peter Son	E. On
	Steve Isser	Good Company
	Chris D. Jones	Duke Energy
	Jeff Peterson	Duke Energy
	Cathy Cioffi	ERCOT
	Manuel Munoz	Center Point Energy
	Doug Murray	ERCOT
	Calvin Opheim	ERCOT
	Michael Juricek	ONCOR
	Paul Hassink	AEPSC
	Bob Lane	Luminant
	Kathy Boydston	TPWD
	Manho Joung	LCRA
	Kevin Hanson	ERCOT
	Mike Lee	PUCT
	Brian Gedrich	Nextera
	Eddy Trevino	SECO
	Chad Blevins	Blevins Energy
	David Schanbacher	TCPA
	Jay Tonne	TCEQ
	David Milner	CPS
	John Moore	Stratus Energy
	Dana Showalter	ERCOT
Dan Woodfin	ERCOT	
Warren Lasher	ERCOT	
Via WebEx or Phone:	Steven Oltmanns	General Electric
	Lloyd Kolb	GSEC
	Adan Martinez	General Land Office
	April Pinkston	ONCOR
	Doug Evans	South Texas Electric Coop
	Chuck Sears	City of Denton
	Thomas McFarling	Dashiell Corp.
	Philip DiPastena	ERCOT
	Wayne Kemper	Center Point Energy
	Colin Meehan	Environmental Defense Fund
	Mike Grimes	Horizon
Wendell Bell	Texas Public Power Association	