



# System Planning Division

**Monthly Status Report** 

to

**Reliability and Operations Subcommittee** 

for

**December 2008** 

# **Report Highlights**

- ERCOT is currently tracking 254 active generation interconnection requests totaling over 106,000 MW. This includes almost 52,000 MW of wind generation.
- 93 MW of new wind generation began commercial operation in December, bringing the currently installed total of wind power capacity to 8,005 MW.
- Regional Planning is currently reviewing proposed transmission improvements with a total cost of \$766 Million
- Transmission Projects approved in 2008 total \$255 Million
- All projects (in engineering, routing, licensing and construction) totals approximately \$4.1 Billion
- Transmission Projects energized in 2008 total about \$453 Million

Item

1.

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## 1. Generation Interconnection

Additional information regarding detailed generation interconnection and impact studies is contained in the "Generation Project Interconnection Information" folder in the "Operations and System Planning" area on the ERCOT website: <u>http://planning.ercot.com/login/login</u>.

#### 1.1 New Generation Beginning Commercial Operations

• No-Trees Wind (07INR0005) in Ector County for 93 MW

• The total installed wind capacity is now 8,005 MW, of which 7,347 (92%) is located within the Western Congestion Management Zone.

#### 1.2 New Generation Interconnection Agreements

Lorraine Wind Park (09INR0047) in Mitchell County for 251 MW Cobisa-Greenville Combined Cycle Plant (06INR0006) in Hunt County for 1,792 MW

#### 1.3 Summary of Active Generation Interconnection Requests

GENERATION INTERCONNECTION REQUESTS CURRENTLY BEING PROCESSED Currently tracking 254 active generation interconnection or change requests								
As of December 31, 2008	North	South	West	Total				
Security Screening Study	2	6	12	20				
SSS Completed	4	15	29	48				
Full Interconnect Study	35	35	80	150				
FIS Completed	1	8	0	9				
Interconnect Agreement Completed	7	8	9	24				
Capacity under Interconnection Agreements	5,308	2,578	1,262	9,148				
Capacity for Grid, MW	25,438	36,868	43,739	106,045				
Wind Capacity, MW 2,047 10,135 39,464 51								

Fuel Type	Non-Public (MW)	Public (MW)	Grand Total (MW)		
Gas-CC	22,790	5,229	28,019		
Gas-CT	1,353	505	1,858		
Nuclear	3,200	9,186	12,386		
Coal	5,375	4,131	9,506		
Wind	44,603	7,043	51,646		
Solar	955	0	955		
Biomass	50	145	195		
Other	1,480	0	1,480		
Grand Total	79,806	26,239	106,045		

### 1.4 Potential Future Generation Interconnections

The table below summarizes the publicly known potential future generation projects for the ERCOT region. (IA=Interconnect Agreement, PL=Public Letter, XX= cancelled)

Future Generation Interconnections (Public Projects) as of December 31, 2008								
INR	SiteName	Status	County	Region	COD	Fuel	MW For Grid	Change from Last Report
08INR0046	Bosque Expansion	IA	Bosque	North	Mar-09	Gas-CC	255	
07INR0036	Coyote Run Windfarm	IA	Borden	West	Mar-09	Wind	225	
08INR0065	Buffalo Gap 4 and 5	PL	Nolan	West	Mar-09	Wind	465	
09INR0026a	Sterling Energy Center	PL	Sterling	West	Mar-09	Wind	200	
08INR0025	Pistol Hill Energy Center	PL	Ector	West	Mar-09	Wind	300	
09INR0072	Dansby3	PL	Brazos	North	Apr-09	Gas-CT	48	
07INR0027	S Houston Green Power Exp	IA	Galveston	South	Apr-09	Gas-CC	244	
10INR0025	Mont Belvieu	IA	Chambers	South	Apr-09	Gas-CT	0	New IA
07INR0028b	Goat Wind - phase 2	IA	Sterling	West	Apr-09	Wind	70	
08INR0012	Papalote Creek Wind Farm	IA	San Patricio	South	May-09	Wind	180	
08INR0040	Lenorah Project	PL	Martin	West	May-09	Wind	350	
09INR0060	Stephens Wind Farm	PL	Borden	West	May-09	Wind	141	
08INR0035	Cedar Bayou 4	IA	Chambers	South	Jun-09	Gas-CC	539	
09INR0026	Sterling Energy Center	PL	Sterling	West	Jun-09	Wind	300	
09INR0036	McAdoo Energy Center II	PL	Dickens	West	Jun-09	Wind	500	
08INR0003	Sandow 5	IA	Milam	North	Jul-09	Coal	581	
09INR0027	Winchester Power Park	IA	Fayette	South	Jul-09	Gas-CT	178	
09INR0006a	Oak Grove SES 1	IA	Robertson	North	Jul-09	Coal	855	
08INR0033	Lufkin	IA	Angelina	North	Sep-09	Biomass	45	
05INR0015b	Gulf Wind 2	PL	Kenedy	South	Sep-09	Wind	400	
09INR0015	Comanche Peak 1&2 Upgrade	PL	Somervell	North	Oct-09	Nuclear	86	
09INR0028	V H Braunig 6	PL	Bexar	South	Oct-09	Gas-CT	185	
08INR0018	Gunsight Mountain	IA	Howard	West	Oct-09	Wind	120	
09INR0039	Nueces Bay 7 Repowering	IA	Nueces	South	Nov-09	Gas-CC	327	
09INR0038	Barney Davis 2 Repowering	IA	Nueces	South	Nov-09	Gas-CC	360	
09INR0034	Gatesville Wind Farm	PL	Coryell	North	Dec-09	Wind	200	
08INR0038	M Bar Wind	PL	Andrews	West	Dec-09	Wind	194	
09INR0047	Loraine Windpark	IA	Mitchell	West	Dec-09	Wind	251	New IA
06INR0029	Jackson Mountain	IA	Nolan	West	Jan-10	Wind	90	
09INR0006b	Oak Grove SES 2	IA	Robertson	North	Jan-10	Coal	855	
09INR0037	Scurry County Wind III	PL	Scurry	West	Mar-10	Wind	350	
09INR0002	J K Spruce 2	IA	Bexar	South	Jun-10	Coal	750	
09INR0045	Sand Hill Peakers	PL	Travis	South	Jul-10	Gas-CT	94	Date
05INR0015c	Gulf Wind 3	PL	Kenedy	South	Sep-10	Wind	400	
06INR0012b	Sherbino Mesa Wind Farm 2	IA	Pecos	West	Oct-10	Wind	150	
12INR0003	Throckmorton Wind Farm	PL	Throckmorton	West	Dec-10	Wind	400	

10INIP0020	Panda Temple Power	DI	Boll	North	May-11	Gas-CC	1002	
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10INR0010	Jack County 2	PL	Jack	North	Jun-11	Gas-CC	620	
06INR0026	Wild Horse Mountain	IA	Howard	West	Dec-11	Wind	120	Date
09INR0007	Nacogdoches Project	PL	Nacogdoches	North	Apr-12	Biomass	100	
07INR0004	Pampa Energy Center	PL	Gray	West	May-12	Coal	165	
09INR0001	Sandy Creek 1	IA	McLennan	North	Jun-12	Coal	925	
09INR0024	B&B Panhandle Wind	PL	Carson	West	Jun-12	Wind	1001	
12INR0004	Fort Concho Wind Farm	PL	Tom Green	West	Jul-12	Wind	400	
06INR0006	Cobisa-Greenville	IA	Hunt	North	May-13	Gas-CC	1792	Date/MW/IA
04INR0011b	Mesquite Wind Phase 4	IA	Shackelford	West	Jun-13	Wind	136	
04INR0011c	Cottonwood Wind	IA	Shackelford	West	Jun-13	Wind	100	
15INR0002	Comanche Peak 3 and 4	PL	Somervel	North	Jan-15	Nuclear	3200	
11INR0011	Victoria City Nuclear	PL	Victoria	South	Jan-15	Nuclear	3200	
15INR0008	STP 3 and 4	PL	Matagorda	South	Jan-15	Nuclear	2700	
							26,239	



(as of December 31, 2008)

## 2. Regional Planning Group Project Reviews

- American Electric Power Service Corporation submitted a project to construct 2 new 138 kV substations, rebuild a 138 kV circuit, build 2 new 138 kV circuits, and install a new 138/69 kV autotransformer in the Abilene/San Angelo area. The estimated cost of this project is \$105.9 M. This project is in ERCOT Independent Review.
- Luminant submitted a set of projects to reduce North to South Congestion. It consists of several 138 kV line upgrades and series reactor installations. The total cost for all projects is approximately \$31 M. This project is in ERCOT Independent Review.
- Oncor submitted a project to install an additional 300 MVar of dynamic reactive at Renner station. The estimated cost of this project is \$ 35 M with an in-service of 2010. This project is in ERCOT Independent Review.
- Oncor submitted a project to relieve congestion related to new wind units in the Lamesa area. The project will upgrade the Lamesa to Bluff Creek 138 kV line, rebuild the Bluff Creek to China Grove 138 kV line, rebuild the Lamesa to Ackerly Vealmoor 69 kV line to 138/69 kV double circuit, rebuild the Lamesa 138 kV switching station, build a new 138 kV Ackerly Vealmoor station, add second circuits to all rebuilt lines and include station upgrades at China Grove and Big Spring. The cost of this project is \$ 80.8 M. This project will be reviewed to ensure that the improvements fit into the likely CREZ transmission solution for the area. This project is in ERCOT Independent Review.
- Oncor submitted a project to add several 345 kV circuits to support the addition of Comanche Peak units 3 and 4 in 2015 at an estimated cost of \$ 133 M. These upgrades include a new 345 kV double circuit line with one circuit in place from Comanche to Whitney, a new 345 kV line from Comanche to Johnson Switch, a new circuit on existing structures from Johnson Switch to Everman, a new 345 kV double circuit with one circuit in place from Comanche to DeCordova, and a new 345 kV line on existing structures from Comanche to Parker Switch. This project is in ERCOT Independent Review.
- Austin Energy submitted a project to establish a 138 kV circuit from Hicross to Slaughter Lane by building 2.2 miles of new transmission line to an un-energized 1.2 mile circuit segment. This project will cost \$5.774 M with an estimated completion date of October 2010. This project is in the comment period.
- Oncor submitted a project to add a 138/69 kV autotransformer at Stanton East into the Spraberry to Big Spring 69 kV line and rebuild the 138 kV line from Stanton East to Big Spring Switch. This project will cost \$15 M with an estimated completion date no earlier than summer 2011. This project is in study period.
- Sharyland Utilities submitted a project to construct and operate the ERCOT Southeast Loop facilities consisting of a 345 kV double circuit from Lufkin to Canal 345 kV substation on the northeast side of Houston. This project will cost \$359 M with an estimated completion date of summer 2013. This project is in the comment period.

# 3. Other Notable Activities

All postings referred to below can be found at <u>http://planning.ercot.com/login/login</u> unless otherwise indicated.

- ERCOT Regional Planning has completed work on the 2013 case to be used for reliability analysis and RPG analysis. The purpose of this effort was to extend the 2007 Five-Year plan from 2012 to 2013. The report of this study was written as an addendum to the 2007 Five-Year plan and has been posted on the ERCOT Planning and Operation Information website.
- ERCOT Regional Planning has begun work on the 2009 Five-Year Transmission Plan utilizing the latest SSWG base cases. This work is in the conditioning phase where projects in the base cases requiring RPG review that have not undergone that review are removed.
- ERCOT TPIT report for 11/01/08 (4<sup>th</sup> Quarter) completed and posted on 11/26/08.
- Updates to the SSWG 2008 Data Set A, 2009 Data Set A, 2009 Data Set B cases were posted.