

# System Planning Division

**Monthly Status Report** 

# to

**Reliability and Operations Subcommittee** 

for

November 2008

### <u>Report Highlights</u>

- ERCOT is currently tracking 244 active generation interconnection requests totaling over 102,000 MW. This includes almost 48,000 MW of wind generation.
- 2,010 MW of new generation began commercial operation in November, of which 332 MW was gas-fired and 1,678 MW was from wind turbines, bringing the currently installed total of wind power capacity to 7,912 MW.
- Regional Planning is currently reviewing proposed transmission improvements with a total cost of \$471 Million
- Transmission Projects approved in 2008 to date 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

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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

- Victoria Power Station (08INR0050) Combined Cycle in Victoria County for 332 MW
- Turkey Track Wind Energy (07INR0011) in Nolan County for 170 MW
- Hackberry Wind Farm (07INR0011e) in Shackelford County for 165 MW
- Pyron Wind Farm (07INR0045a) in Scurry County for 249 MW
- Bull Creek Wind Plant (07INR0037) in Borden County for 180 MW
- Elbow Creek Wind Farm (08INR0053) in Howard County for 117 MW
- Inadale Wind Farm (07INR0045b) in Scurry County for 197 MW
- Panther Creek 2 Wind Farm (08INR0037) in Scurry County for 115 MW
- Gulf Wind I (05INR0015a) in Kenedy County for 283 MW
- Penascal Wind (06INR0022a) in Kenedy County for 202 MW
  - The total installed wind capacity is now 7,912 MW, of which 7,254 (92%) is located within the Western Congestion Management Zone.

#### 1.2 Summary of Active Generation Interconnection Requests

GENERATION INTERCONNECTION REQUESTS CURRENTLY BEING PROCESSED Currently tracking 244 active generation interconnection or change requests						
As of November 30, 2008	North	South	West	Total		
Security Screening Study	3	8	12	23		
SSS Completed	4	16	23	43		
Full Interconnect Study	36	30	80	146		
FIS Completed	1	8	0	9		
Interconnect Agreement Completed	6	7	10	23		
Capacity under Interconnection Agreements	3,516	2,578	1,413	7,507		
Capacity for Grid, MW	25,396	36,643	40,110	102,149		
Wind Capacity, MW	2,047	9,910	35,927	47,884		

Fuel Type	Non-Public (MW)	Public (MW)	Grand Total (MW)
Gas-CC	22,790	5,187	27,977
Gas-CT	1,353	505	1,858
Nuclear	3,200	9,186	12,386
Coal	5,375	4,131	9,506
Wind	40,691	7,194	47,884
Solar	863	0	863
Biomass	50	145	195
Other	1,480	0	1,480
Grand Total	75,802	26,348	102,149

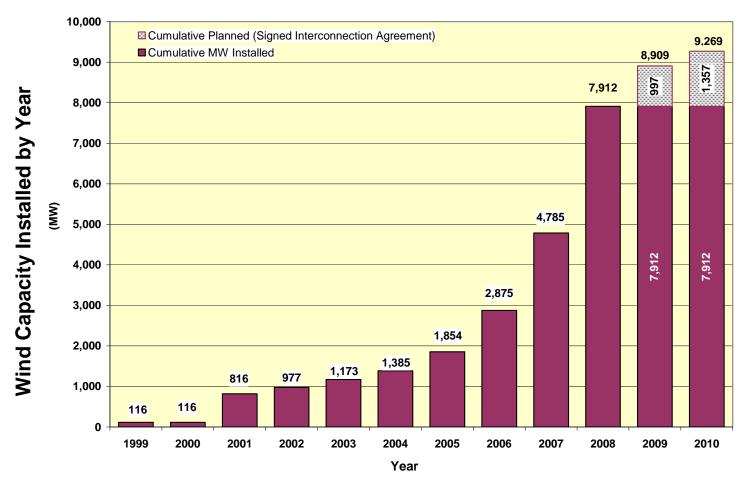
#### **1.3 Potential Future Generation Interconnections**

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 November 30, 2008

INR	SiteName	Status	County	Region	COD	Fuel	MW For Grid	Change from Last Report
07INR0036	Coyote Run Windfarm	IA	Borden	West	Mar-09	Wind	225	
08INR0025	Pistol Hill Energy Center	PL	Ector	West	Mar-09	Wind	300	Date
08INR0046	Bosque Expansion	IA	Bosque	North	Mar-09	Gas-CC	255	
08INR0065	Buffalo Gap 4 and 5	PL	Nolan	West	Mar-09	Wind	465	
09INR0026a	Sterling Energy Center	PL	Sterling	West	Mar-09	Wind	200	Date
07INR0027	S Houston Green Power Exp Prj1	IA	Galveston	South	Apr-09	Gas-CC	244	
07INR0028b	Goat Wind - phase 2	IA	Sterling	West	Apr-09	Wind	70	
09INR0072	Dansby3	PL	Brazos	North	Apr-09	Gas-CT	48	
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	
08INR0059	Gray Wind Project	XX	Borden	West	Dec-08	Wind	141	Cancelled
09INR0026	Sterling Energy Center	PL	Sterling	West	Jun-09	Wind	300	
09INR0036	McAdoo Energy Center II	PL	Dickens	West	Jun-09	Wind	500	
09INR0006a	Oak Grove SES 1	IA	Robertson	North	Jul-09	Coal	855	
08INR0003	Sandow 5	IA	Milam	North	Jul-09	Coal	581	
09INR0027	Winchester Power Park	IA	Fayette	South	Jul-09	Gas-CT	178	
05INR0015b	Gulf Wind 2	PL	Kenedy	South	Sep-09	Wind	400	
08INR0033	Lufkin	IA	Angelina	North	Sep-09	Biomass	45	
09INR0015	Comanche Peak 1&2 Upgrade	PL	Somervell	North	Oct-09	Nuclear	86	
08INR0018	Gunsight Mountain	IA	Howard	West	Oct-09	Wind	120	
09INR0028	V H Braunig 6	PL	Bexar	South	Oct-09	Gas-CT	185	

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	
09INR0045	Sand Hill Peakers	PL	Travis	South	Nov-09	Gas-CT	94	
08INR0038	M Bar Wind	PL	Andrews	West	Dec-09	Wind	194	
09INR0034	Gatesville Wind Farm	PL	Coryell	North	Dec-09	Wind	200	
09INR0047	Loraine Windpark	IA	Mitchell	West	Dec-09	Wind	251	New
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	
06INR0006	Cobisa-Greenville	PL	Hunt	North	May-10	Gas-CC	1,750	
09INR0002	J K Spruce 2	IA	Bexar	South	Jun-10	Coal	750	
05INR0015c	Gulf Wind 3	PL	Kenedy	South	Sep-10	Wind	400	
06INR0012b	Sherbino Mesa Wind Farm 2	IA	Pecos	West	Oct-10	Wind	150	
06INR0026	Wild Horse Mountain	IA	Howard	West	Dec-10	Wind	120	
12INR0003	Throckmorton Wind Farm	PL	Throckmorton	West	Dec-10	Wind	400	
10INR0020	Panda Temple Power	PL	Bell	North	May-11	Gas-CC	1,092	
10INR0010	Jack County 2	PL	Jack	North	Jun-11	Gas-CC	620	
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	1,001	
12INR0004	Fort Concho Wind Farm	PL	Tom Green	West	Jul-12	Wind	400	
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	3,200	
15INR0008	STP 3 and 4	PL	Matagorda	South	Jan-15	Nuclear	2,700	
11INR0011	Victoria City Nuclear	PL	Victoria	South	Jan-15	Nuclear	3,200	
							26,348	



(as of November 30, 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.
- AEPSC submitted a project to add a 345 kV Transmission Substation at the point in Haskell County where the Oklaunion to Mulberry Creek and Tonkawa to Graham 345 kV lines cross called Clear Crossing and construct a new 345 kV transmission circuit from the existing Oklaunion Substation to the Bowman Substation. This project was a result of the 2007 Five-Year Plan. Clear Crossing is projected to be in service by peak 2010 with a cost of \$14 M. The Oklaunion to Bowman 345 kV line is estimated to be in service by the end of 2011 with a cost of \$71 M. The need for the Oklaunion to Bowman part of the project has been established by the PUC Docket 33672. Determination of the builder of this project will be decided in PUC Docket 35665. RPG Review of this part of the project can not continue. RPG review of the Clear Crossing part of 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 unenergized 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.

## **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 is continuing 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 is being written as an addendum to the 2007 Five-Year plan and will be posted upon completion in late 2008 or early 2009.
- ERCOT TPIT report for 11/01/08 (4<sup>th</sup> Quarter) completed and posted on 11/26/08.