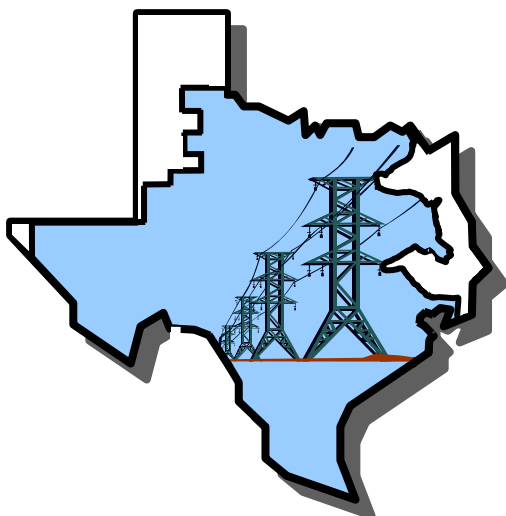




# System Planning Division



## Monthly Status Report to Reliability and Operations Subcommittee for April 2008 (revised May 13, 2008\*)

### Report Highlights

#### Item

1. ERCOT is currently tracking 234 [active generation interconnection requests](#) totaling over 104,000 MW. This includes almost 49,000 MW of wind generation.
2. [New Interconnect Agreements](#) signed:
  - Victoria Power Station for 332 MW (Combined Cycle Gas Plant) in Victoria County with in-service date of July 2008. This is the first interconnect to convert an existing retired unit into combined cycle operation by adding a gas turbine and heat recovery steam generation equipment (HRSG).
3. One new generation facility began commercial operation.
  - Louis Wind (Buffalo Gap 3) in Nolan County – 138 MW
  - Total installed wind in ERCOT is 5,311 MW
4. The 2008 CSC Utilization Report was presented to WMS in April. Details at: <http://www.ercot.com/calendar/2008/04/20080416-WMS.html>
5. [Regional Planning](#) is currently reviewing proposed transmission improvements with a total cost of \$227.6 M.

\* Project in-service date change

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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: <http://oldercot.ercot.com/tmaps>.

## 1.1. New Generation Beginning Commercial Operations

### Wind:

- Louis (Buffalo Gap 3) for 138 MW in Nolan County

Note: These units are included in the online wind capacity amount of 5,311 MW

## 1.2. New Signed Interconnection Agreements (also found in 1.4 Table)

Victoria Power Station (08INR0050) for 332 MW in Victoria County **with in-service date of July 2008.**

## 1.3. Summary of Active Generation Interconnection Requests

<b>GENERATION INTERCONNECTION REQUESTS CURRENTLY BEING PROCESSED</b>					
Currently tracking 233 active generation interconnection or change requests					
As of February 29, 2008					
		North	South	West	Total
Security Screening Study		5	8	14	27
SSS Completed		5	11	20	36
Full Interconnect Study		30	27	72	129
FIS Completed		0	2	1	3
Interconnect Agreement Completed		7	9	23	39
Capacity for Grid, MW		<b>29,083</b>	<b>32,075</b>	<b>43,030</b>	<b>104,188</b>
Wind Capacity, MW		2,555	6,765	39,435	48,755

Fuel	Public (MW)	Non-public (MW)	Total (MW)
<b>Combined Cycle - Gas</b>	4,295	25,743	30,038
<b>Combustion Turbine - Gas</b>	646	463	1,109
<b>Nuclear</b>	9,186	6,400	15,586
<b>Coal</b>	4,131	4,424	8,555
<b>Wind</b>	10,000	38,755	48,755
<b>Other</b>		145	145
<b>Totals</b>	<b>28,258</b>	<b>75,930</b>	<b>104,188</b>

#### 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)

Future Generation Interconnections (Public Projects) as of April 30, 2008								
INR	Site Name	Status	County	Region	Fuel	In-Service Date	MW Into Grid	Change from Last Report
06INR0036	Quail Run Energy Center 2	IA	Ector	West	Gas-CC	May-08	275	
06INR0035	Colorado Bend Energy Center 2	IA	Wharton	South	Gas-CC	Jun-08	275	
07INR0027	South Houston Green Pwr Exp Prj1	IA	Galveston	South	Gas-CC	Jun-08	244	
07INR0022	Airtricity Panther Creek Wind Farm	IA	Howard	West	Wind	Jun-08	150	
08INR0050	Victoria Power Station	IA	Victoria	South	Gas-CC	Jul-08	332	New IA
08INR0028	McAdoo Energy Center	IA	Dickens	North	Wind	Jul-08	300	
08INR0064	Laredo Peaking Power Plant	IA	Webb	South	Gas-CT	Aug-08	193	
03INR0030b	Wild Horse Wind Farm 2	IA	Cottle	West	Wind	Aug-08	39	
04INR0017	Ocotillo Wind Farm 1	IA	Howard	West	Wind	Aug-08	59	
04INR0011c	Cottonwood Wind	IA	Shackelford	West	Wind	Aug-08	100	
04INR0011b	Mesquite Wind Phase 4	IA	Shackelford	West	Wind	Aug-08	136	
08INR0055	Capricorn Ridge III	IA	Coke	West	Wind	Aug-08	249	
06INR0012a	Sherbino Mesa Wind Farm 1	IA	Pecos	West	Wind	Sep-08	150	Phased
08INR0038	M Bar Wind	PL	Andrews	West	Wind	Sep-08	194	
07INR0034	Wolf Ridge Windfarm	IA	Cooke	North	Wind	Oct-08	113	
07INR0025	Airtricity Lamesa Wind Plant	IA	Dawson	West	Wind	Oct-08	183	
07INR0037	Bull Creek Wind Plant	IA	Borden	West	Wind	Oct-08	180	
07INR0045b	Airtricity Inadale	IA	Scurry	West	Wind	Nov-08	212	
07INR0045a	Airtricity Pyron Wind Farm	IA	Scurry	West	Wind	Nov-08	303	
05INR0015a	Gulf Wind 1	IA	Kenedy	South	Wind	Dec-08	283	
06INR0022a	Penascal Wind Farm 1	IA	Kenedy	South	Wind	Dec-08	202	
07INR0005	Notrees-1	IA	Ector	West	Wind	Dec-08	150.75	
04INR0011e	Hackberry Wind Farm	IA	Shackelford	West	Wind	Dec-08	165	
07INR0011	Turkey Track Energy Center	IA	Nolan	West	Wind	Dec-08	170	
07INR0029	South Trent Wind Farm	IA	Taylor	West	Wind	Dec-08	101.2	
08INR0018	Gunsight Mountain	IA	Howard	West	Wind	Dec-08	120	
08INR0025	Pistol Hill Energy Center	PL	Ector	West	Wind	Dec-08	300	
08INR0037	Airtricity Panther Creek 2	IA	Howard	West	Wind	Dec-08	220	
08INR0053	Elbow Creek Wind Project	IA	Howard	West	Wind	Dec-08	117.3	
08INR0059	Gray Wind Project	PL	Borden	West	Wind	Dec-08	141	
09INR0026a	Sterling Energy Center	PL	Sterling	West	Wind	Dec-08	200	
08INR0046	Bosque Expansion	IA	Bosque	North	Gas-CC	Mar-09	255	
07INR0036	Coyote Run Windfarm	IA	Borden	West	Wind	Mar-09	225	
08INR0065	Buffalo Gap 4 and 5	PL	Nolan	West	Wind	Mar-09	465	
09INR0028	V H Braunig 6	PL	Bexar	South	Gas-CT	May-09	185	
08INR0040	Lenorah Project	PL	Martin	West	Wind	May-09	350	
09INR0060	Wind TexStephens WndFrm	PL	Borden	West	Wind	May-09	141	
08INR0035	Cedar Bayou 4	IA	Chambers	South	Gas-CC	Jun-09	544	
09INR0027	Winchester Peaking Plant	IA	Fayette	South	Gas-CT	Jun-09	178	

09INR0045	Sand Hill Peakers	PL	Travis	South	Gas-CT	Jun-09	90
09INR0026	Sterling Energy Center	PL	Sterling	West	Wind	Jun-09	300
09INR0036	McAdoo Energy Center II	PL	Dickens	West	Wind	Jun-09	500
08INR0003	Sandow 5	IA	Milam	North	Coal	Jul-09	581
05INR0015b	Gulf Wind 2	PL	Kenedy	South	Wind	Sep-09	400
09INR0015	Comanche Peak 1&2 Upgrade	PL	Somervell	North	Nuclear	Oct-09	86
09INR0006a	Oak Grove SES 1	IA	Robertson	North	Coal	Nov-09	855
03INR0030a	Wild Horse Wind Farm 1	IA	Cottle	West	Wind	Nov-09	60
09INR0034	Gatesville Wind Farm	PL	Coryell	North	Wind	Dec-09	200
09INR0037	Scurry County Wind III	PL	Scurry	West	Wind	Mar-10	350
06INR0006	Cobisa-Greenville	PL	Hunt	North	Gas-CC	May-10	1750
09INR0006b	Oak Grove SES 2	IA	Robertson	North	Coal	May-10	855
09INR0002	J K Spruce 2	IA	Bexar	South	Coal	Jun-10	750
09INR0001	Sandy Creek 1	IA	McLennan	North	Coal	Sep-10	925
05INR0015c	Gulf Wind 3	PL	Kenedy	South	Wind	Sep-10	400
06INR0012b	Sherbino Mesa Wind Farm 2	IA	Pecos	West	Wind	Oct-10	150
06INR0026	Wild Horse Mountain	IA	Howard	West	Wind	Dec-10	120
12INR0003	Throckmorton Wind Farm	PL	Throckmorton	West	Wind	Dec-10	400
10INR0010	Jack County 2	PL	Jack	North	Gas-CC	Jun-11	620
07INR0004	Pampa Energy Center	PL	Gray	West	Coal	May-12	165
09INR0024	B&B Panhandle Wind	PL	Carson	West	Wind	Jun-12	1001
12INR0004	Fort Concho Wind Farm	PL	Tom Green	West	Wind	Jul-12	400
15INR0002	Comanche Peak 3 and 4	PL	Somervell	North	Nuclear	Jan-15	3200
15INR0008	STP 3 and 4	PL	Matagorda	South	Nuclear	Jan-15	2700
11INR0011	Victoria City Nuclear	PL	Victoria	South	Nuclear	Jan-15	3200
						TOTAL	28,258

Phased

## 2. Regional Planning Group Project Reviews

- Oncor submitted a two phase project to relieve congestion related to new wind units in the Lamesa area. The first phase of the project will upgrade both ends, but not the middle of 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, and build a new 138 kV Ackerly Vealmoor station. The cost of the first phase of these upgrades is \$40.3 M. The second phase of the project would be done if a third wind unit signs an interconnect agreement. This phase would add second circuits to all rebuilt lines and include station upgrades at China Grove and Big Spring. The additional cost of the second phase upgrades is \$40.5 M for a total of \$80.8 M. Both phases of this project are being reviewed to ensure that the improvements fit into the likely CREZ transmission solution for the area.
- Oncor submitted a project to construct the Krum Tap Switching Station and rebuild the Krum – Decatur 69 kV line and the Krum Tap 138 kV line as a 138 kV double-circuit line with one circuit in place using a conductor with a minimum rating of 214 MVA. The estimated cost of this project is \$17.8 M and is currently in ERCOT Independent Review.
- LCRA submitted a project to add a 3<sup>rd</sup> 345/138 kV autotransformer at the Zorn substation. This project should be complete by summer peak 2013 and cost is estimated at \$15 M. This project is currently in ERCOT Independent Review.
- Oncor submitted a project to upgrade the Midland East – Stanton East – Big Spring West – Big Spring Switch 138 kV line. The proposed upgrade will replace the existing 4/0 ACSR 84 MVA circuit with a single circuit line with a long-term emergency rating of 394 MVA. The estimated completion date is peak 2010 with a cost of approximately \$ 24 M. This project is being reviewed to ensure that the improvements are compatible with the likely CREZ transmission solution for the area.
- AEPSC submitted a project to increase the reliability of service in the Presidio area. This project will install a second 138/69 kV autotransformer at Marfa in 2008, install 2-2.4 MW NaS battery units at Presidio in 2009, and replace the existing 69 kV line with a 138kV-capable but 69kV-operated line from Alamito Creek to Chinati to Presidio in 2012. Total cost of the project is estimated to be \$67 M. This project is currently in ERCOT Independent Review.
- CNP Energy submitted a 2007 Five-Year Plan project to install a new 345/138 kV substation called Rothwood to eliminate potential unserved energy under contingency scenario(s). The projected completion date is summer 2010 with an estimated cost of \$23 M. This project will be presented to TAC and the ERCOT Board of Directors in May 2008.

## 3. Congestion Management

- Zonal congestion costs during the first quarter of 2008 are almost as much as for the entire year of 2007.
- Two thirds of the zonal congestion costs during the first quarter of 2008 were attributable to congestion between the West and North zones.

- Transmission outages affected the ability to transfer power between West and North zones. Requests for some of these key outages were not submitted to ERCOT in time to be included in the determination of how many TCRs to sell. This resulted in West to North TCRs being oversold, contributing to high BENA charges.

### CSC Congestion Charges collected from QSEs

<i>\$Million</i>	N_H	S_H	N_S	S_N	W_N	N_W	TOTAL
2008 total	6.7	--	11.6	-6.9	40.4	8.8	60.5
2007 Q1	--	1.0	--	0.1	--	1.1	2.0
2007 total	39.8	12.5	--	-1.5	5.1	4.4	60.3

Settlement quality data available through March 2008.

### Congestion vs. TCRs – Jan - Mar 2008

<b>Jan.</b>	N_H	N_S	S_N	W_N	N_W	Month total
Congestion Charges	0	2.6	-2.0	7.5	0.7	8.8
TCR Payout	0	1.7	0.6	15.7	1.8	19.9
Est. Shortfall	0	0.9	2.6	8.2	1.1	11.1

<b>Feb.</b>	N_H	N_S	S_N	W_N	N_W	Month total
Congestion Charges	0	7.0	-0.5	8.5	8.1	23.1
TCR Payout	0	4.9	0.2	27.6	28.9	61.7
Est. Shortfall	0	2.1	0.7	19.1	20.8	38.6

<b>Mar.</b>	N_H	N_S	S_N	W_N	N_W	Month total
Congestion Charges	6.7	2.0	-4.4	24.4	~0.01	28.7
TCR Payout	8.0	1.3	2.5	49.1	0.05	61.0
Est. Shortfall	1.3	.7	6.9	24.7	0.04	32.3

**Congestion & TCR Report:** for the details of the tables below (intervals, flows / limits, costs and quantities) see the **TCR Congestion20080414** presentation to the April WMS (Item 6 in the Key Documents) at the following link: <http://www.ercot.com/calendar/2008/04/20080416-WMS.html>

#### **4. Other Notable Activities**

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