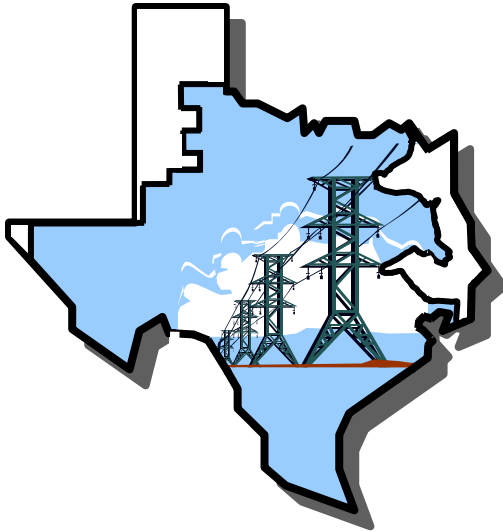




# System Planning Division



## Monthly Status Report to Reliability and Operations Subcommittee for May 2009

### Report Highlights

#### Item

1.
  - ERCOT is currently tracking 242 active generation interconnection requests totaling almost 97,000 MW. This includes over 39,000 MW of wind generation.
  
2.
  - Regional Planning is currently reviewing proposed transmission improvements with a total cost of \$948.3 Million
  - Transmission Projects approved in 2009 total \$ 105 Million
  - All projects (in engineering, routing, licensing and construction) totals approximately \$4.1 Billion
  - Transmission Projects energized in 2008 total about \$453 million

## Table of Contents

1. Generation Interconnection.....	1
1.1 New Generation Beginning Commercial Operations.....	1
1.2 New Generation Interconnection Agreements .....	1
1.3 Summary of Active Generation Interconnection Requests .....	1
1.4 Publicly Disclosed Generation Interconnection Projects.....	3
1.5 Generation Projects Undergoing Full Interconnection Studies .....	5
1.6 Wind Generation .....	6
2. Regional Planning Group Project Reviews.....	7
3. Other Notable Activities .....	8

# 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://planning.ercot.com/login/login>.

## 1.1 New Generation Beginning Commercial Operations - none for May 2009

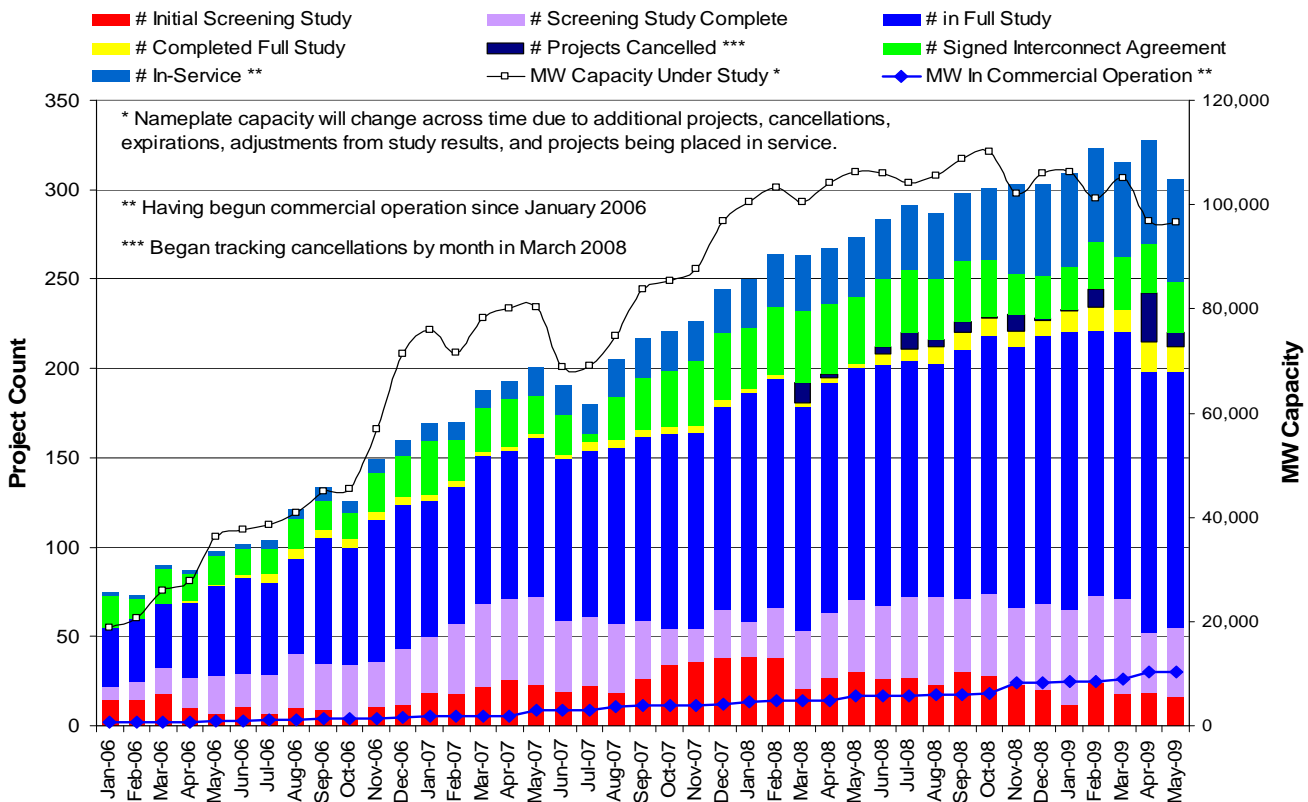
- The total installed wind capacity remains 8,135 MW, of which 7,477 (92%) is located within the Western Congestion Management Zone.

## 1.2 New Generation Interconnection Agreements

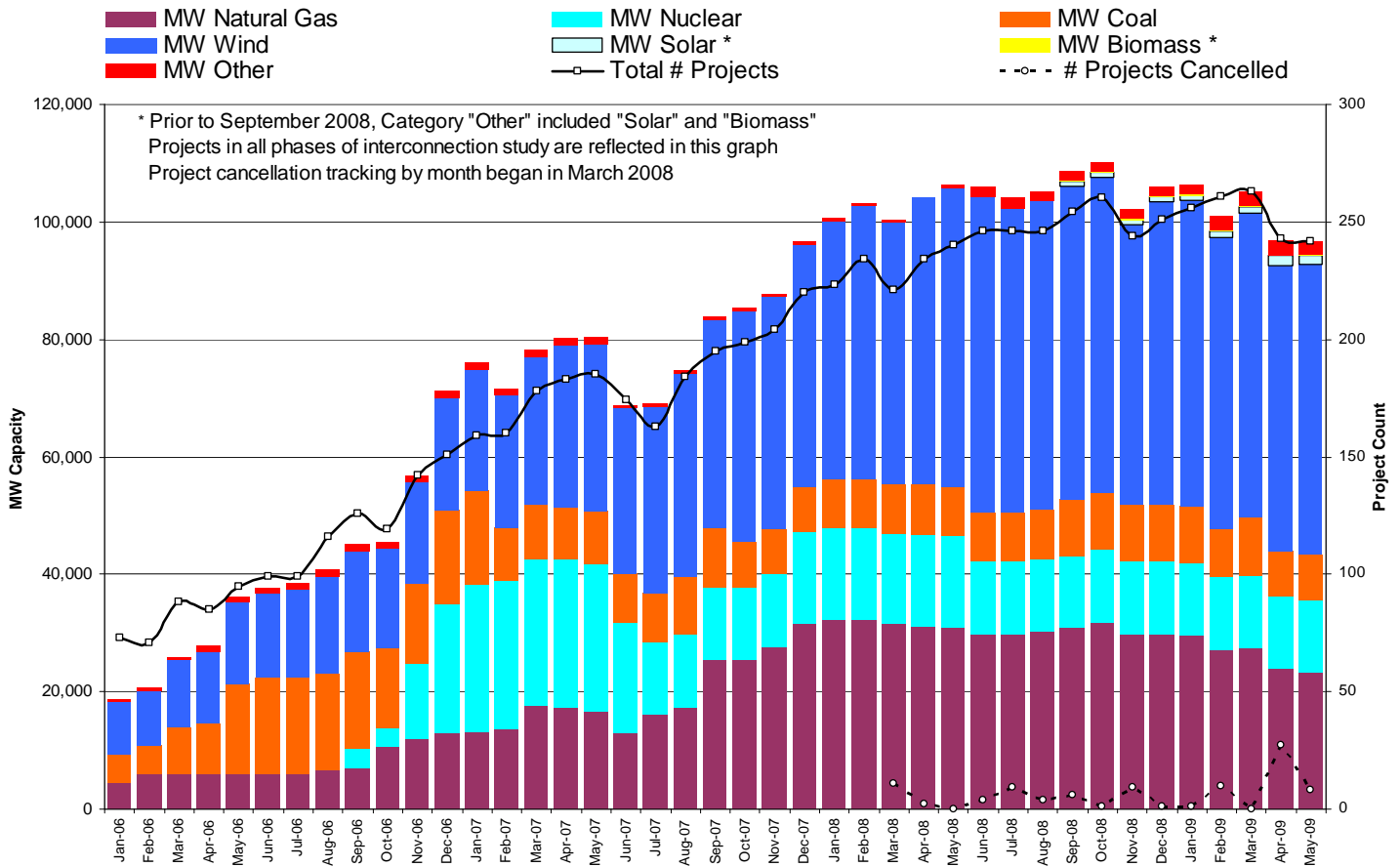
- Penascal Wind Farm II & III (06INR0022) - 404 MW Wind in Kenedy County

## 1.3 Summary of Active Generation Interconnection Requests

GENERATION INTERCONNECTION REQUESTS CURRENTLY BEING PROCESSED				
Currently tracking 242 active generation interconnection or change requests				
As of May 31, 2009	North	South	West	Total
Security Screening Study	3	6	7	16
SSS Completed	2	12	25	39
Full Interconnect Study	28	34	81	143
FIS Completed	5	5	4	14
Interconnect Agreement Completed	8	11	11	28
Capacity under Interconnection Agreements	5,342	2,550	2,003	9,895
Capacity for Grid, MW	<b>23,105</b>	<b>32,950</b>	<b>40,645</b>	<b>96,700</b>
Wind Capacity, MW	1,687	7,355	29,982	39,024



Fuel Type	Confidential Projects (MW)	Projects Under Full Study (MW)	Projects w/ Interconnect Agreement/Public Letter (MW)	Grand Total (MW)
Gas-CC	-	-	4,241	21,708
Gas-CT	-	-	527	1,677
Total Gas	1,725	16,892	4,768	23,385
Nuclear	0	3,200	9,186	12,386
Coal	0	3,995	3,550	7,545
Wind	10,555	31,159	7,688	49,402
Solar	1,268	369	0	1,637
Biomass	0	50	145	195
Other	950	1,200	0	2,150
Grand Total	14,498	56,865	25,337	96,700



## 1.4 Publicly Disclosed Generation Interconnection Projects

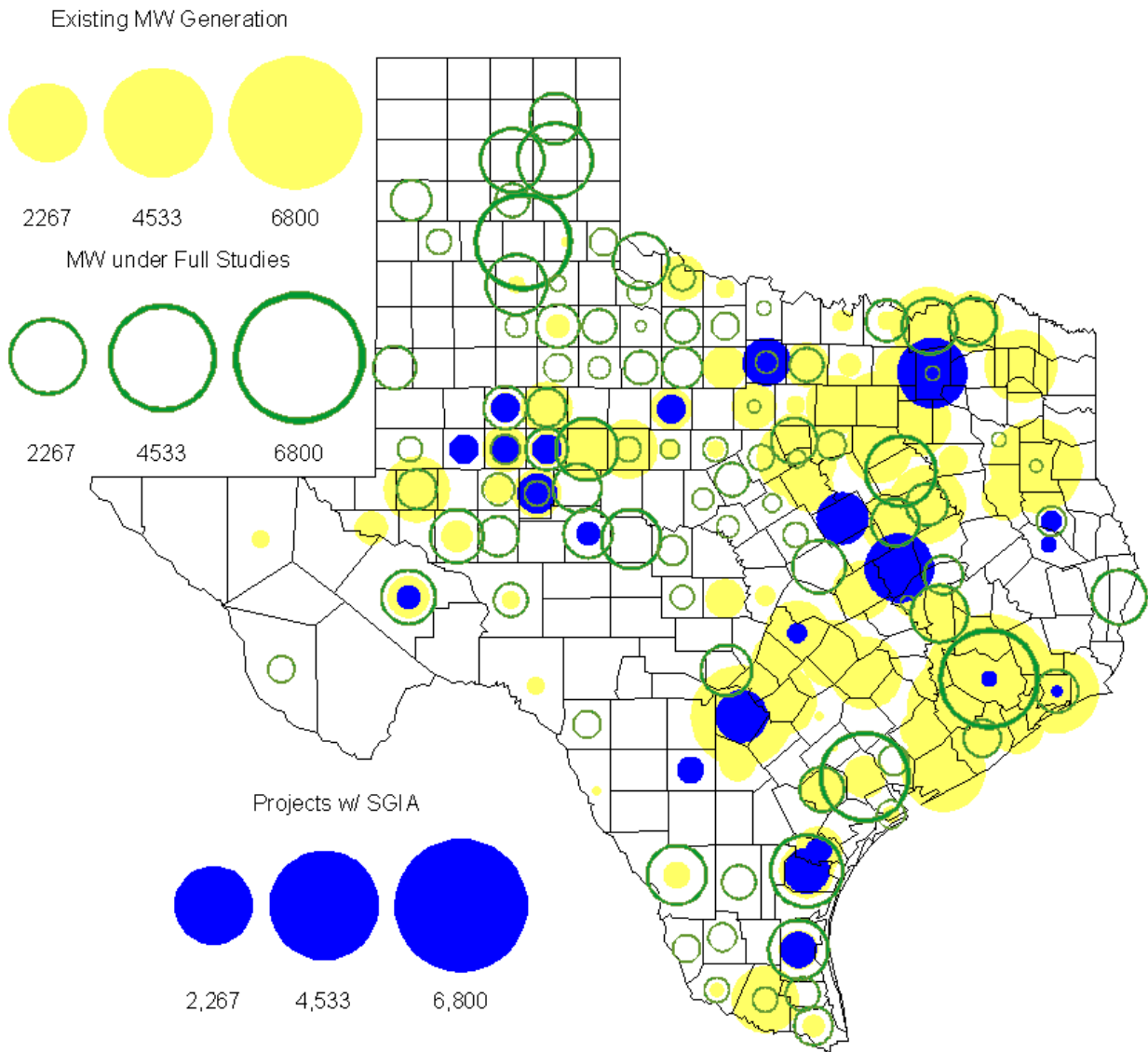
The table below summarizes the publicly disclosed generation projects for the ERCOT region.

(IA=Interconnect Agreement, PL=Public Letter, XX= cancelled)

Generation Interconnections as of May 31, 2009								
INR	SiteName	Status	County	Region	COD	Fuel	MW For Grid	Change from Last Report
08INR0065	Buffalo Gap 4 and 5	PL	Nolan	West	Mar-11	Wind	465	
10INR0025	Mont Belvieu	IA	Chambers	South	May-09	Gas-CT	0	
09INR0036	McAdoo Energy Center II	PL	Dickens	West	Jun-09	Wind	500	
09INR0039	Nueces Bay 7 Repowering	IA	Nueces	South	Jul-09	Gas-CC	327	
09INR0079	Pearsall Expansion	IA	Frio	South	Aug-09	Gas-CT	200	
09INR0072	Dansby3	PL	Brazos	North	Aug-09	Gas-CT	48	
08INR0033	Lufkin	IA	Angelina	North	Sep-09	Biomass	45	
05INR0015b	Gulf Wind 2	PL	Kenedy	South	Sep-09	Wind	400	
09INR0028	V H Braunig 6	IA	Bexar	South	Oct-09	Gas-CT	185	
09INR0015	Comanche Peak 1&2 Upgrade	PL	Somervell	North	Oct-09	Nuclear	86	
08INR0012a	Papalote Creek Wind Farm	IA	San Patricio	South	Oct-09	Wind	180	
11INR0015	Panther Creek 3	IA	Sterling	West	Nov-09	Wind	200	
09INR0038	Barney Davis 2 Repowering	IA	Nueces	South	Nov-09	Gas-CC	360	
09INR0006a	Oak Grove SES 1	IA	Robertson	North	Nov-09	Coal	855	
09INR0047	Loraine Windpark	IA	Mitchell	West	Dec-09	Wind	251	
09INR0034	Gatesville Wind Farm	PL	Coryell	North	Dec-09	Wind	200	
08INR0038	M Bar Wind	PL	Andrews	West	Dec-09	Wind	194	
10INR0026	Langford Wind Power	IA	Tom Green	West	Dec-09	Wind	150	
11INR0014	TECO Central Plant	IA	Harris	South	Feb-10	Gas-CC	50	
09INR0037	Scurry County Wind III	PL	Scurry	West	Mar-10	Wind	350	
09INR0006b	Oak Grove SES 2	IA	Robertson	North	May-10	Coal	855	
09INR0002	J K Spruce 2	IA	Bexar	South	Jun-10	Coal	750	
09INR0045	Sand Hill Peakers	IA	Travis	South	Jul-10	Gas-CT	94	
06INR0012b	Sherbino Mesa Wind Farm 2	IA	Pecos	West	Jul-10	Wind	150	Date
05INR0015c	Gulf Wind 3	PL	Kenedy	South	Sep-10	Wind	400	
08INR0011	Senate Wind Project	IA	Jack	North	Nov-10	Wind	150	
12INR0003	Throckmorton Wind Farm	PL	Throckmorton	West	Dec-10	Wind	400	
06INR0022c	Penascal Wind Farm 2	IA	Kenedy	South	Dec-10	Wind	202	New IA
07INR0036	Coyote Run Windfarm	IA	Borden	West	Mar-11	Wind	225	
10INR0020	Panda Temple Power	PL	Bell	North	May-11	Gas-CC	1,092	
10INR0010	Jack County 2	IA	Jack	North	Jun-11	Gas-CC	620	
08INR0018	Gunsight Mountain	IA	Howard	West	Aug-11	Wind	120	
09INR0060	Stephens Wind Farm	PL	Borden	West	Nov-11	Wind	141	
06INR0026	Wild Horse Mountain	IA	Howard	West	Dec-11	Wind	120	
08INR0025	Pistol Hill Energy Center	PL	Ector	West	Dec-11	Wind	300	
06INR0022b	Penascal Wind Farm 3	IA	Kenedy	South	Dec-11	Wind	202	New IA
09INR0007	Nacogdoches Project	IA	Nacogdoches	North	Apr-12	Biomass	100	
07INR0004	Pampa Energy Center	PL	Gray	West	May-12	Coal	165	
09INR0026a	Sterling Energy Center	PL	Sterling	West	Jun-12	Wind	200	
09INR0026	Sterling Energy Center	IA	Sterling	West	Jun-12	Wind	300	
09INR0024	B&B Panhandle Wind	PL	Carson	West	Jun-12	Wind	1,001	
09INR0001	Sandy Creek 1	IA	McLennan	North	Jun-12	Coal	925	

12INR0004	Fort Concho Wind Farm	PL	Tom Green	West	Jul-12	Wind	400	
08INR0040	Lenorah Project	IA	Martin	West	Sep-12	Wind	251	
06INR0006	Cobisa-Greenville	IA	Hunt	North	May-13	Gas-CC	1,792	
04INR0011c	Cottonwood Wind	IA	Shackelford	West	Jun-13	Wind	100	
04INR0011b	Mesquite Wind Phase 4	IA	Shackelford	West	Jun-13	Wind	136	
15INR0008	STP 3 and 4	PL	Matagorda	South	Jan-15	Nuclear	2,700	
15INR0002	Comanche Peak 3 and 4	PL	Somervel	North	Jan-15	Nuclear	3,200	
11INR0011	Victoria City Nuclear	PL	Victoria	South	Jan-15	Nuclear	3,200	
06INR0029	<b>Jackson Mountain</b>	<b>XX</b>	<b>Nolan</b>	<b>West</b>	<b>Jan-10</b>	<b>Wind</b>	<b>90</b>	<b>Cancelled</b>
							25,337	

### County Location of Installed Generation and Interconnection Requests (all fuels)



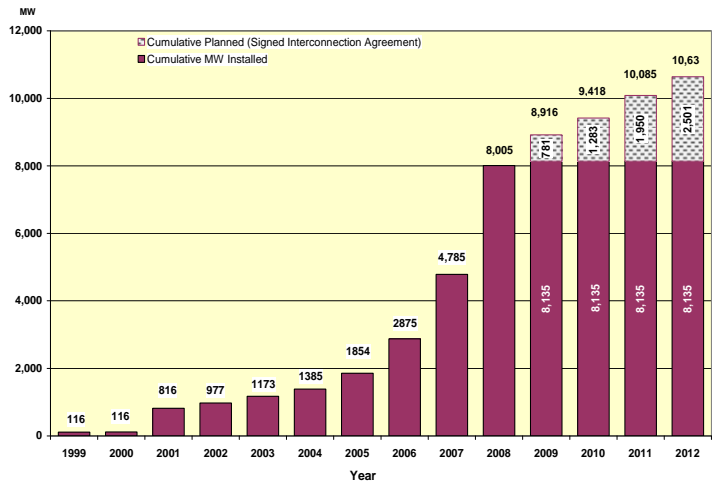
## 1.5 Generation Projects Undergoing Full Interconnection Studies

INR	County	Capacity	COD	Fuel	INR	County	Capacity	COD	Fuel
08INR0044	Concho	200	TBD	Wind	08INR0049	Clay	50	TBD	Wind
09INR0064	Borden	41	TBD	Wind	08INR0042	Coke	200	TBD	Wind
08INR0041	Coke	200	TBD	Wind	09INR0059	Freestone	20	TBD	Coal
09INR0025	Concho	180	Jun-09	Wind	08INR0005	Wise	400	Jun-09	Gas
10INR0027	Nueces	35	Oct-09	Wind	09INR0075	Kinney	248	Oct-09	Wind
09INR0055	McCulloch	299	Oct-09	Wind	09INR0041	Mitchell	300	Oct-09	Wind
07INR0014b	Wilbarger	70	Oct-09	Wind	07INR0014a	Wilbarger	140	Oct-09	Wind
09INR0048	Jack	150	Oct-09	Wind	08INR0054	Comanche	401	Oct-09	Wind
09INR0073	Scurry	200	Nov-09	Wind	08INR0031	Childress	100	Nov-09	Wind
11INR0013	Mills	150	Dec-09	Wind	11INR0012	Duval	400	Dec-09	Wind
09INR0082	Webb	300	Dec-09	Wind	09INR0077	Reagan	500	Dec-09	Wind
09INR0065	Webb	150	Dec-09	Wind	09INR0061	Kent	258	Dec-09	Wind
09INR0058	Howard	250	Dec-09	Wind	09INR0054	Stonewall	148.5	Dec-09	Wind
09INR0051	Borden	249	Dec-09	Wind	08INR0056	Nolan	149	Dec-09	Wind
08INR0039	Hamilton	90	Dec-09	Wind	08INR0023	Floyd	100	Dec-09	Wind
08INR0022	Floyd	100	Dec-09	Wind	09INR0029	Calhoun	263	Dec-09	Coal
07INR0008	Howard	35	Dec-09	Wind	11INR0036a	Matagorda	200	Jan-10	Wind
11INR0033a	Cameron	200	Jan-10	Wind	10INR0048	Hardeman	1000	Jan-10	Wind
10INR0047	Kendall	1000	Jan-10	Wind	10INR0024	Briscoe	3000	Jan-10	Wind
10INR0011	Johnson	275	Jan-10	Gas	09INR0062	Brown	140	Mar-10	Wind
10INR0046	Jim Hogg	264	Apr-10	Wind	10INR0045	Webb	734	Apr-10	Wind
10INR0079	Nolan	60	May-10	Wind	10INR0054	Palo Pinto	36	May-10	Wind
10INR0023	Haskell	386	May-10	Wind	10INR0016	Childress	150	May-10	Wind
09INR0070	Reagan	42	May-10	Wind	09INR0069	Reagan	36	May-10	Wind
09INR0035	Concho	750	May-10	Wind	09INR0018	Concho	249	May-10	Wind
07INR0032	Tom Green	249	May-10	Wind	10INR0017	Chambers	685	May-10	Gas
10INR0069	Rusk	818	May-10	Coal	10INR0035	Harris	416	Jun-10	Gas
10INR0029	Hood	810	Jun-10	Gas	09INR0081	Rusk	818	Jun-10	Coal
10INR0057	Taylor	200	Jul-10	Wind	10INR0052a	Knox	21	Jul-10	Wind
10INR0013	Upton	400	Jul-10	Wind	10INR0012	Nacogdoches	300	Jul-10	Gas
10INR0038	Glasscock	350	Aug-10	Wind	10INR0071	Matagorda	88	Sep-10	Wind
10INR0041	Floyd	135	Oct-10	Wind	10INR0015	Mitchell	350	Oct-10	Wind
09INR0074	Motley	70	Oct-10	Wind	11INR0029	Throckmorton	200	Nov-10	Wind
10INR0070	Hunt	50	Nov-10	Gas	10INR0039	Dickens	200	Nov-10	Wind
10INR0080	Presidio	144	Dec-10	Solar	10INR0077	Callahan	101	Dec-10	Wind
10INR0060	Willacy	400.5	Dec-10	Wind	10INR0059	Zapata	250.7	Dec-10	Wind
10INR0056	Borden	249	Dec-10	Wind	10INR0051	Brazoria	200	Dec-10	Wind
10INR0042	Mason	170	Dec-10	Wind	10INR0033	Armstrong	420	Dec-10	Wind
10INR0032	Navarro	800	Dec-10	Gas	10INR0019	Deaf Smith	609	Dec-10	Wind
10INR0008	Pecos	500	Dec-10	Wind	09INR0076	Jackson	300	Dec-10	Wind
09INR0031	Ector	275	Dec-10	Gas	08INR0062	Archer	249	Dec-10	Wind
08INR0061	Hardeman	200	Dec-10	Wind	07INR0035	Tom Green	270	Dec-10	Wind
07INR0026	Baylor	400	Dec-10	Wind	07INR0017	Erath	210	Dec-10	Wind
07INR0015	Foard	180	Dec-10	Wind	07INR0013	Coke	200	Dec-10	Wind
11INR0036b	Matagorda	200	Jan-11	Wind	11INR0033b	Cameron	200	Jan-11	Wind
11INR0050	Crosby	149	Mar-11	Wind	08INR0014	Webb	183	Mar-11	Wind
11INR0061	Presidio	90	May-11	Solar	11INR0058	Pecos	135	May-11	Solar
11INR0046	Brazoria	300	May-11	Gas	11INR0037	Smith	55	May-11	Biomass
11INR0028	Grimes	1280	May-11	Gas	10INR0009	Castro	200	May-11	Wind
11INR0057	Cameron	144	Jun-11	Wind	11INR0019	Upton	200	Jun-11	Wind

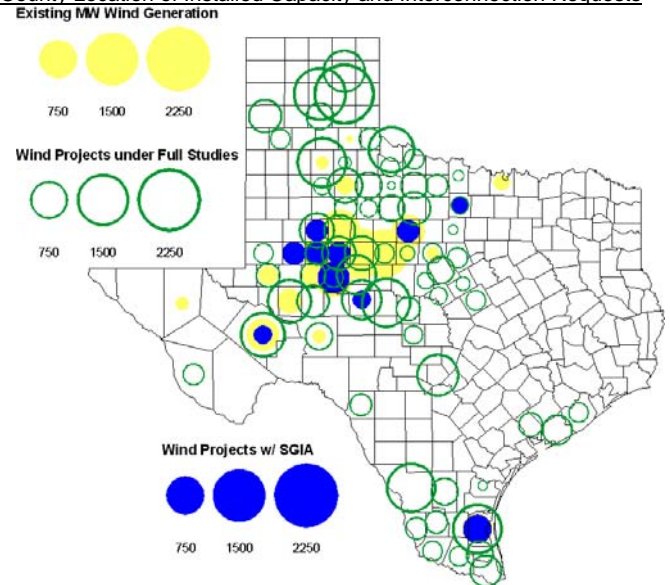
11INR0009	Navarro	1200	Jun-11	Gas	09INR0050	Fannin	1200	Jun-11	Gas
08INR0020	Eastland	200	Jun-11	Wind	11INR0006	Lamar	579	Jul-11	Gas
06INR0041	Newton	1160	Jul-11	Gas	11INR0040	freestone	749	Aug-11	Gas
11INR0039	Starr	201	Sep-11	Wind	11INR0008a	Roberts	1000	Sep-11	Wind
10INR0021	Grayson	646	Nov-11	Gas	09INR0016	Yoakum	680	Nov-11	Gas
11INR0043	Coke	300	Dec-11	Wind	11INR0025	Crockett	400	Dec-11	Wind
11INR0005	Upton	500	Dec-11	Wind	06INR0022d	Kenedy	200	Dec-11	Wind
10INR0018	Madison	550	Mar-12	Gas	12INR0007	Lamar	296	May-12	Gas
12INR0006	Limestone	875	Jun-12	Coal	10INR0022	Harris	3500	Jun-12	Gas
12INR0002	Briscoe	750	Jul-12	Wind	12INR0016	Nueces	1200	Nov-12	Other
08INR0019c	Gray	250	Nov-12	Wind	08INR0019b	Gray	250	Nov-12	Wind
08INR0019a	Gray	250	Nov-12	Wind	12INR0022	Hidalgo	200	Dec-12	Wind
12INR0018	Gray	600	Dec-12	Wind	12INR0005	Floyd	1100	Dec-12	Wind
11INR0023	King	400	Dec-12	Wind	06INR0022f	Kenedy	200	Dec-12	Wind
12INR0009	Nueces	875	May-13	Gas	13INR0006	Gray	750	Oct-13	Wind
13INR0005	Carson	600	Oct-13	Wind	06INR0022e	Kenedy	200	Dec-13	Wind
14INR0002	Goliad	756	Feb-14	Coal	14INR0003	Nolan	850	Jun-14	Coal
14INR0005	Matagorda	1200	Jul-14	Coal	14INR0001	Pecos	500	Dec-14	Wind
15INR0003	Matagorda	3200	Jan-15	Nuclear					

## 1.6 Wind Generation

### Wind Capacity Installed by Year



### County Location of Installed Capacity and Interconnection Requests





## 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. The review of this project is complete and an ERCOT Recommendation Letter is in process.
- 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 and will be studied as part of the 2009 Five-Year Transmission Plan.
- 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 and will be studied when the 2009 Five-Year Transmission Plan is complete.
- 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 ERCOT Independent Review and will be studied as part of the 2009 Five-Year Transmission Plan.
- Austin Energy submitted a project to relocate the Decker to Techridge circuit to new ROW so that the existing structures can be utilized for the new Gilleland to Techridge circuit. The estimated completion date of this project is November 2010 and estimated cost is \$ 4.3 M. This project is in ERCOT Independent Review.
- The Lower Colorado River Authority Transmission Services Company (LCRA TSC) submitted a project to construct a new 6.2 mile transmission line from Highway 123 to Cushman substation. The estimated completion date of this project is June 2014 and estimated cost is \$ 11.6 M. This project is in ERCOT Independent Review.
- The Lower Colorado River Authority Transmission Services Company (LCRA TSC) submitted a project to construct a new 7.8 mile transmission line between the existing GPI and Parkway substations. The estimated completion date of this project is June 2013 and estimated cost is \$ 12.9 M. This project is in ERCOT Independent Review.
- Centerpoint Energy has submitted a project to expand the Zenith substation, add one 800 MVA autotransformer, connect Zenith to existing circuits near the Gertie substation and upgrade/reconfigure nearby 138 kV circuits. The estimated completion date of this project is summer 2012 and estimated cost is \$ 26.6 M. This project is in ERCOT Independent Review.
- American Electric Power Service Corporation submitted a project to construct several improvements in the Corpus Christi area. The estimated completion date of this project is June 2012 and estimated cost is \$ 214 M. This project is in ERCOT Independent Review.

### 3. Other Notable Activities

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

- The reliability phase of the 2009 Five-Year Transmission Plan utilizing the latest SSWG base cases is underway. Projects to eliminate unserved energy have been identified and sent to Transmission Owners. Most of the Transmission owners have replied with their concurrence or set of alternate projects. This phase will continue with G-1 analysis.
- RMR exit strategy development is underway for the Permian Basin RMR unit.
- ERCOT has contracted with PB Americas, Inc. to perform the Voltage Ride-Through (VRT) Study. A kick-off meeting with PB and ERCOT staff has been held. The project will proceed in three phases. Phase I is a simulation of the VRT capabilities of the system with existing wind farm models. Phase II will consist of model improvement. Both of these phases are scheduled for completion by the End of 2009. Phase III involves simulating the VRT capabilities of the system with the revised models and investigation of any required changes.
- Began co-ordination with Steady-State Working Group to create Data Set A cases.
- Completed analysis to propose SAPS to Menard 138 kV line as a CRE for the W – N CSC.
- ERCOT TPIT report for 2009 2<sup>nd</sup> quarter was posted on June 1, 2009