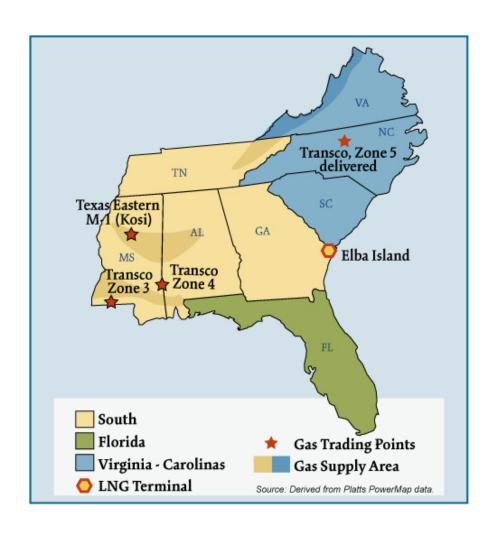
## **Southeast Natural Gas Regions**



#### Overview:

### **Market Description**

Industrial process requirements and power consumption are the fundamental drivers of the Southeast gas market. Florida is the biggest market for gas and accounts for about 30 percent of overall regional demand; the power sector comprises more than 80 percent of Florida's total demand. Overall storage capacity is the lowest of any region in the U.S.; regional storage facilities are concentrated in Mississippi. The lack of market area storage means that pipeline companies must issue notices warning customers to seek to closely match their scheduled gas volumes with actual gas usage at times and this can result in higher basis. LNG and pipeline-related infrastructure improvements, however, have augmented regional supply diversification. Principal gas supply sources include: East and South Texas, shallow and deepwater offshore locations, coalbed methane resources in the Black Warrior Basin, as well as various onshore locations, plus imports from the Lake Charles and Elba Island LNG terminals.

#### Geography

**States covered:** Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

#### **Major Trading Hubs**

Florida Gas Zone 3, Texas Eastern M1, Transco Zone 3, Transco Zone 4, and Transco Zone 5.

#### **Storage**

**State Capacity:** Mississippi contains 88 percent of total Southeast capacity.

Aquifer Capacity: 0%

Depleted Field Capacity: 66%

Salt Cavern: 35%

Total Capacity: Southeast has 2 percent of total US storage capacity.

Major Storage Pipelines and Capacity: Southern Natural Gas: 60 Bcf

Petal Gas Storage Company: 10.75 Bcf

#### **Demand by Sector** (2005):

Residential: 16%Commercial: 13%Industrial: 28%

**State:** Alabama, Florida, Georgia, Mississippi and Virginia make up 77 percent of total Southeast demand and 10 percent of total U.S. demand.

Southeast Total: 2.7 Tcf which makes up 12 percent of total U.S. daily demand.

Consumer Total: 8.02 million which is approximately 12 percent of total consumers in the U.S.

**Key Consuming States:** Georgia, North Carolina, Tennessee and Virginia make up 67 percent of the total number of consumers in the Southeast and about 8 percent of the total number of consumers in the U.S.

**Residential Consumers:** 91%

**Average Daily Deliveries through Transcontinental Station 60:** 

2005: 1.7 Bcfd 2006: 1.7 Bcfd

#### **Production**

**State:** Alabama and Virginia make up 90 percent of total Southeast production which only contributes 2 percent to total U.S. production.

**Total:** Total Southeast production makes up a little over 2 percent of total U.S. production.

#### **Prices at Transco Zone 3**

#### 2005

\* Average Daily Price: \$8.97
\* Average Daily Basis: \$0.25
\* Highest Daily Price: \$16.72
\* Lowest Daily Price: \$5.66

#### 2006

\* Average Daily Price: \$ 6.86 \* Average Daily Basis: \$0.11 \* Highest Daily Price: \$9.97 \* Lowest Daily Price: \$3.70

#### **Pipeline Flows**

Average Daily Deliveries into Florida: 2.1 Bcfd (2005) 2.4 Bcfd (2006)

**Major Pipelines:** Florida Gas Transmission, Gulfstream Natural Gas System, Southern Natural Gas Company, Texas Eastern Transmission and Transcontinental Gas Pipeline.

#### **Pipeline Flows (con't)**

#### Average Daily Deliveries on Southern Natural Gas - Segment South of Franklinton

2005: 0.8 Bcfd 2006: 1.0 Bcfd

### Average Daily Deliveries through Texas Eastern M1 @ the Kosciusko

2005: 0.9 Bcfd 2006: 0.9 Bcfd

### **Average Daily Deliveries through Transcontinental Station 65**

2005: 0.7 Bcfd 2006: 1.7 Bcfd

#### **Imports and Exports**

#### Average Daily Sendout at the Elba Island LNG terminal:

2005: 0.3 Bcfd

2006: 0.4 Bcfd

**Major Importers:** BG LNG and Marathon Oil are the principal importers of LNG at Elba Island. Regasified LNG is currently transported into the Southeast via the Southern Natural Gas pipeline.

#### **Focal Points**

**Cypress Pipeline Starts:** Southern Natural Gas, a subsidiary of El Paso Corporation began commercial operation of its 167-mile Cypress Pipeline on May 1, 2007. The 220 MMcfd pipeline connects with Florida Gas Transmission and flows natural gas from the Elba Island, Ga., LNG terminal to power plants, local distribution companies, large industrial plants and municipal customers in Georgia and Florida. The pipeline has increased its customers' supply diversification and access to storage. Previously, gas customers in Florida, mainly power generators, depended solely on Gulf of Mexico supply that is regularly threatened during tropical storms and hurricanes.

Florida Prices: During the summer of 2007, natural gas prices at the Florida Citygates often held a \$1 plus premium to natural gas sold at the Henry Hub. Natural gas is an important fuel for electric power in Florida and currently accounts for over half of its power generation. Excessive heat, full pipes, and periodic supply concerns helped increase the August 2007 average price differential between Florida Citygates and Henry Hub to \$2.47. During the same August time period, Florida gas demand averaged 8.7 Bcf/d, 15% above what was scheduled last year. On Aug 22, natural gas at the Citygates was the most expensive in the country and basis reached \$3.71, the largest it's been in the last 5 years excluding a period after the 2005 hurricanes when infrastructure damage and supply disruptions occurred. Despite Florida's ever growing natural gas market, the Florida Citygates pricing point continues to have limited trading and historically low transaction volumes.

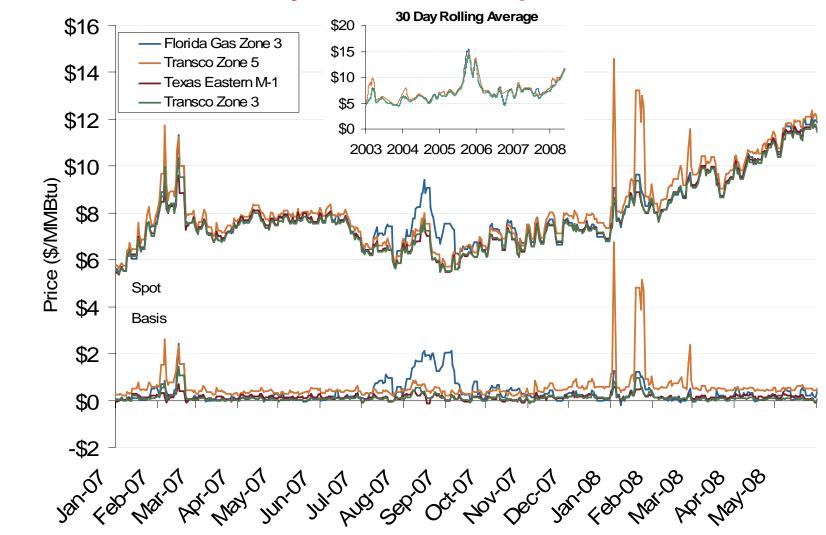
**Florida Flows Increase:** Available capacity data suggests that increased flows on Gulfstream spurred a 12 percent overall increase in Florida deliveries to 2.4 Bcfd from 2.1 Bcfd. Greater gas usage in Florida stemmed from natural gas prices being less expensive than Gulf Coast residual fuel oil for most of 2006.

**LNG Volumes Increase:** According to scheduled volume data, average daily Elba Island, Ga., sendout increased to 375 MMcfd, a rise of 16 percent, in 2006 compared with 316 MMcfd in 2005.

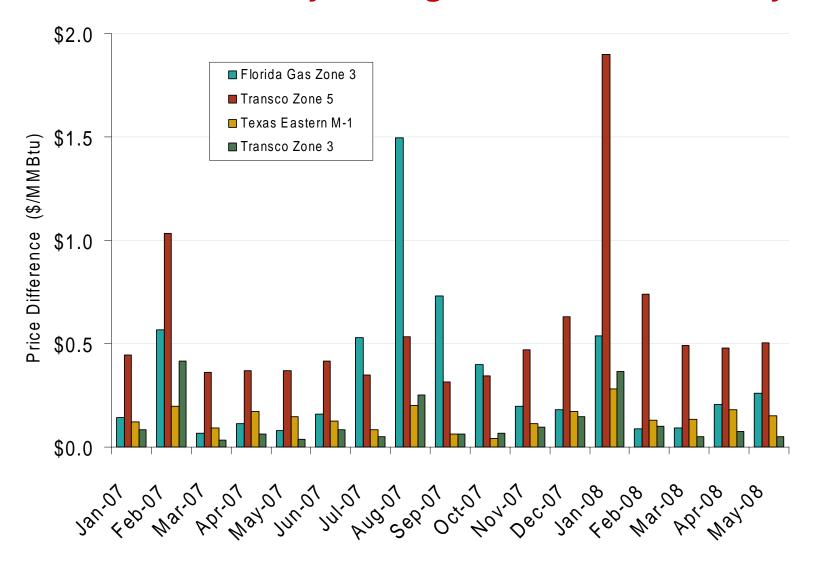
# **Yearly Average of Spot Hub Prices**

Annual Average Day Ahead Prices (\$/MMBtu)				
	2005	2006	2007	5 Years
Henry Hub	\$8.69	\$6.74	\$6.94	\$6.72
FGT Zone 3	\$9.25	\$7.01	\$7.32	\$6.98
Transco Station 65	\$8.98	\$6.84	\$7.05	\$6.84
Transco Zone 5	\$9.40	\$7.13	\$7.41	\$7.30
Tetco M1	\$8.93	\$6.79	\$7.06	\$6.85

# Southeastern Day-Ahead Hub Spot Prices and Basis

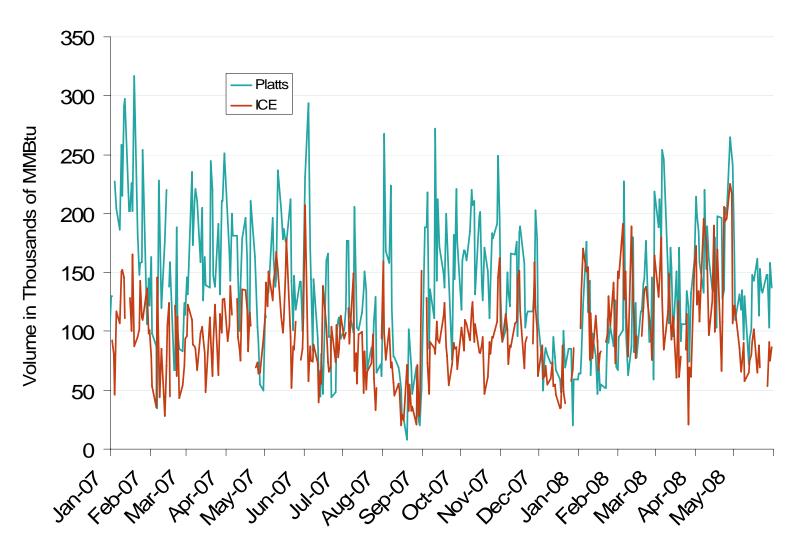


### Southeastern Monthly Average Basis Value to Henry Hub



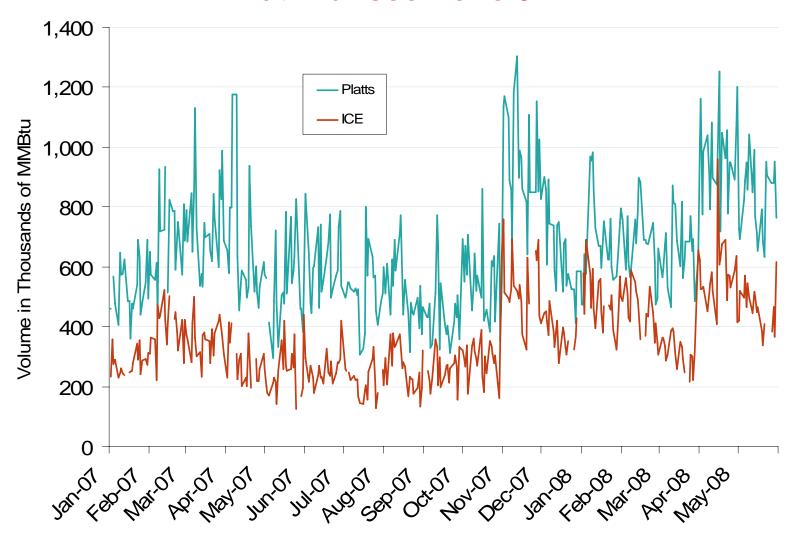
Source: Derived from Platts data.

# Published and Traded Daily Spot Volumes at Texas Eastern M-1 Kosi



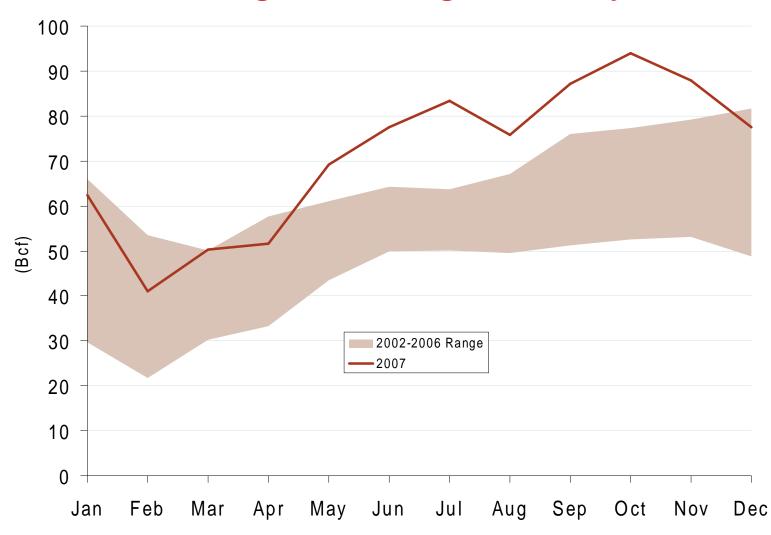
Source: Derived from Platts and ICE data.

# Published and Traded Daily Spot Volumes at Transco Zone 3



Source: Derived from Platts and ICE data.

# **Southeast Regional Storage Inventory Levels**



# **Pipeline Projects**

Pipeline Projects						
Company	Project Name	Capacity (Bcf)	Capital Cost (Millions)+	Status	Year Certificated	State
Dominion Cove Point LNG, LP	Cove Point East Project	445	\$43.5	In-Service 04/05	2003	VA-VA
Petal Gas Storage LLC	Petal Gas	600	\$0.2	In-Service 04/05	2005	MS
East Tennessee Natural Gas Company	Jewell Ridge Pipeline	235	\$53.1	In-Service 10/06	2006	VA-VA
Florida Gas Transmission Company	Phase VII	160	\$105.5	<b>Under Construction</b>	2006	FL-FL
Midwest Gas Transmission Company	MGT Eastern Extension	120	\$26.3	Approved	2006	TN-TN
Southern Natural Gas Company	Cypress Piepline Project	500*	\$321.0	In-Service 05/07	2006	GA-FL
Total		1,560	\$549.6			

<sup>\*</sup> Phase I capacity is 221,000 MMBtu/day. + Capital cost figures are estimates.

# **Storage Projects**

Storage Projects							
Company	Project Name	Capacity (Bcf)	Deliverability (MMcf/d)	Capital Cost (Millions)+	Status	Year Certificated	State
Caledonia Energy Partners, LLC	Caledonia Energy Complex Project	11.7	330	N/A	Under Construction	2005	MS
Freebird Gas Storage, LLC	Freebird Storage	6.1	160	N/A	Under Construction	2005	AL
Gulf South Pipeline Company, LP	Jackson Storage Field Project	2.4	0	\$8.6	Approved	2005	MS
SG Resources Mississippi, LLC	Southern Pines Energy Center	12	12,00	N/A	Limited Service 10/06	2006	MS

<sup>&#</sup>x27;+ Capital cost figures are estimates.

# **LNG Projects**

LNG Projects						
Company	Project Name	Capacity (Bcf)	Send-out (Bcf/d)	Status	Year Certificated	State
Bayou Casotte Energy LLC	Casotte Landing LNG (Pascagoula, MS)	10.1	1.3	Filed 09/05	TBD	MS
Gulf LNG Energy, LLC	Port of Pascagoula LNG (Pascagoula, MS	6.8	1.5	Filed 10/05	TBD	MS
Southern LNG, Inc.	Elba Island Terminal	0	0.5	In Service 2/06	2006	GA
Total 2005		16.9	3.3			

# **Natural Gas Consumers by State (2005)**

					% of	% of
Sector	Residential	Commercial	Industrial	<b>State Total</b>	US	Region
Alabama	799,256	64,473	2,786	866,515	1%	11%
Florida	656,069	55,479	432	711,980	1%	9%
Georgia	1,770,757	128,117	3,453	1,902,327	3%	24%
Mississippi	439,952	53,846	1,151	494,949	1%	6%
North Carolina	992,906	109,205	2,891	1,105,002	2%	14%
South Carolina	541,523	56,974	1,526	600,023	1%	7%
Tennessee	1,049,032	124,755	2,497	1,176,284	2%	15%
Virginia	1,066,302	90,577	1,402	1,158,281	2%	14%
Regional Total	7,315,797	683,426	16,138	8,015,361	12%	100%
Total US	63,573,466	5,196,428	205,217	68,975,111		
% of US	12%	13%	8%	12%		
% of Region	91%	9%	0%	100%		

Source: Derived from EIA data.

Note: Units equal number of consumers.

# **Natural Gas Demand By Sector (2005)**

				Vehicle	Electric	Other		% of	% of
Sector	Residential	Commerical	Industrial	Fuel	Power	Fuel	<b>State Total</b>	US	Region
Alabama	41,682	26,658	151,083	116	104,786	30,013	354,338	2%	13%
Florida	16,124	57,690	63,133	727	630,410	10,643	778,727	4%	28%
Georgia	124,459	52,916	154,176	789	72,267	5,708	410,315	2%	15%
Mississippi	24,151	20,611	93,073	28	135,562	27,232	300,657	1%	11%
North Carolina	63,865	47,696	86,821	80	27,009	4,292	229,763	1%	8%
South Carolina	28,537	22,048	74,002	29	45,011	2,427	172,054	1%	6%
Tennessee	66,250	54,264	94,855	116	5,627	9,250	230,362	1%	8%
Virginia	85,355	65,838	73,741	399	66,951	7,703	299,987	1%	11%
Regional Total	450,423	347,721	790,884	2,284	1,087,623	97,268	2,776,203	12%	100%
US Total	4,806,136	3,101,526	6,745,835	22,265	5,869,145	1,696,296	22,241,203		
% of US	9%	11%	12%	10%	19%	6%	12%		
% of Region	16%	13%	28%	0%	39%	4%	100%		

Source: Derived from EIA data.

# **Natural Gas Production by State**

			Yearly	2005 %	2005 % of
<b>Dry Production</b>	2004	2005	Change	of US	Region
Alabama	300,888	282,769	-6%	1.6%	68%
Florida	2,505	2,121	-15%	0.0%	1%
Mississippi	131,995	38,615	-71%	0.2%	9%
Tennessee	2,100	2,200	5%	0.0%	1%
Virginia	152,495	88,610	-42%	0.5%	21%
Regional Total	589,983	414,315	-30%	2.3%	100%
US Total	18,757,477	18,074,237	-4%		
% of US	3%	2%			

Source: Derived from EIA data.

Note: Units are millions of cubic feet.

# **Natural Gas Storage by Field Type (2005)**

	Salt Dome			Aquifers	Depleted	Depleted Fields		Total	% of US	% of	Dry Proved
Field Type		Capacity		_					Capacity		
Alabama	1	8,300	0	0	1	2,715	2	11,015	0%	6%	3,965,000
Florida	0	0	0	0	0	0	0	0	0%	0%	77,000
Mississippi	3	45,577	0	0	4	105,370	7	150,947	2%	88%	755,000
Tennessee	0	0	0	0	1	1,200	1	1,200	0%	1%	0
Virginia	2	5,618	0	0	1	3,417	3	9,035	0%	5%	2,018,000
Southeast Total	6	59,495	0	0	7	112,702	13	172,197	2%	100%	6,815,000
US Total	30	250,532	44	1,350,689	320	6,667,222	394	8,268,443			204,385,000
% of US	20%	24%	0%	0%	2%	2%	3%	2%			3%
% of Region	46%	35%	0%	0%	54%	65%	100%	100%			

Source: Derived from EIA data.

Note: Capacity units are millions of cubic feet.