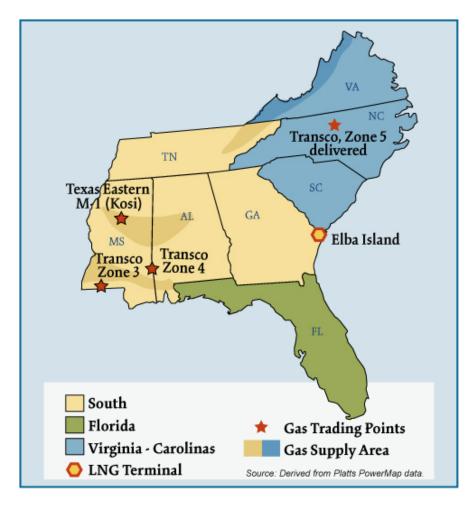
May 2008

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## **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 Zone3, 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.

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## **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

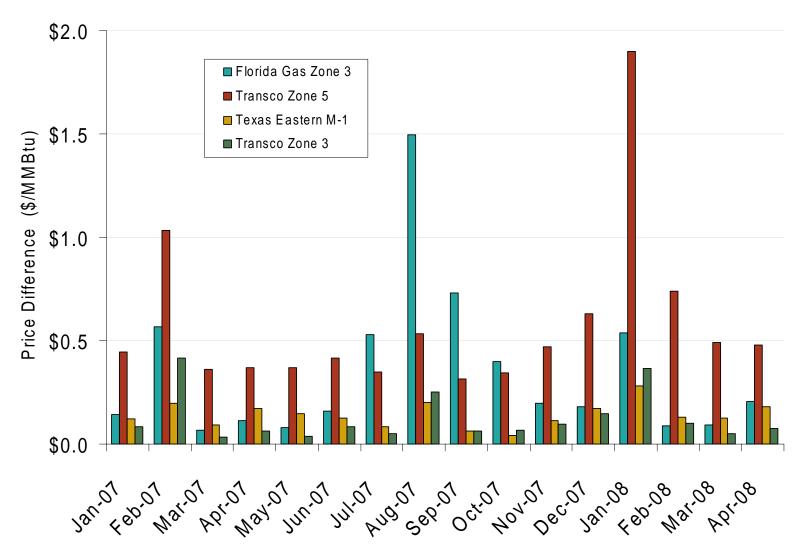
| Annual Average Day Ahead Prices (\$/MMBtu) |        |        |        |         |
|--|--------|--------|--------|---------|
|  | 2005   | 2006   | 2007   | 5 Years |
| Henry Hub                                  | \$8.69 | \$6.74 | \$6.94 | \$6.72  |
| FGT Zone 3                                 | \$9.25 | \$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**



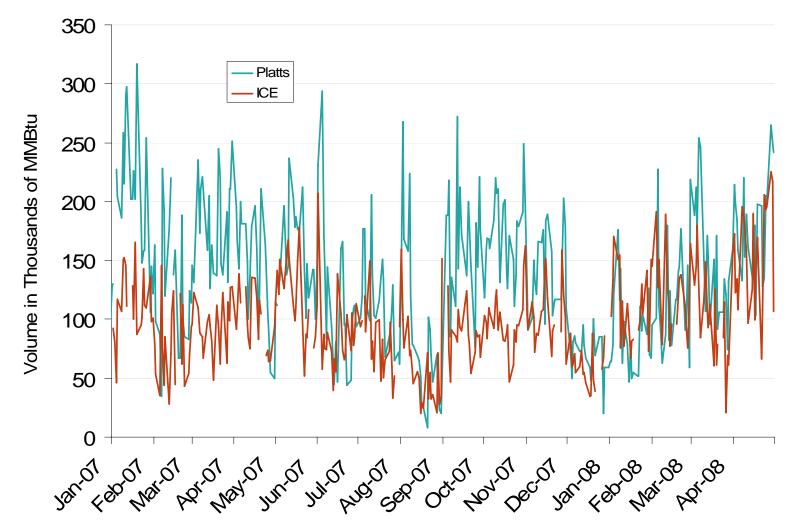
Source: Derived from *Platts* data.

## Southeastern Monthly Average Basis Value to Henry Hub



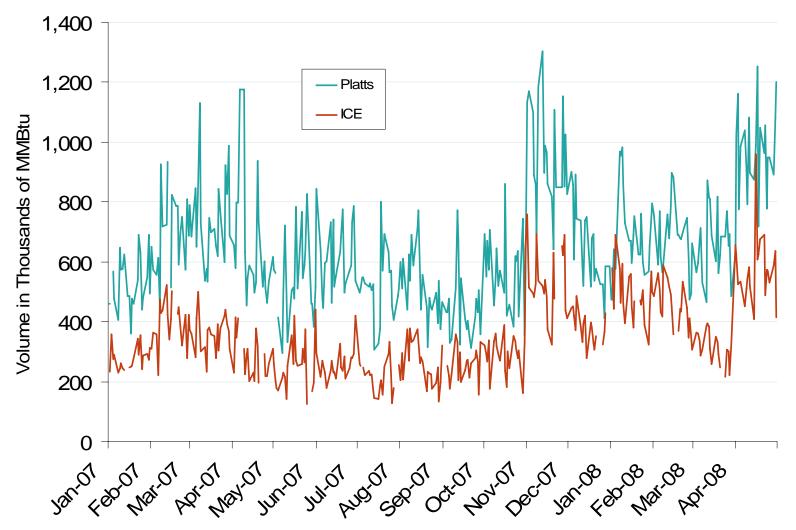
Source: Derived from Platts data.

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



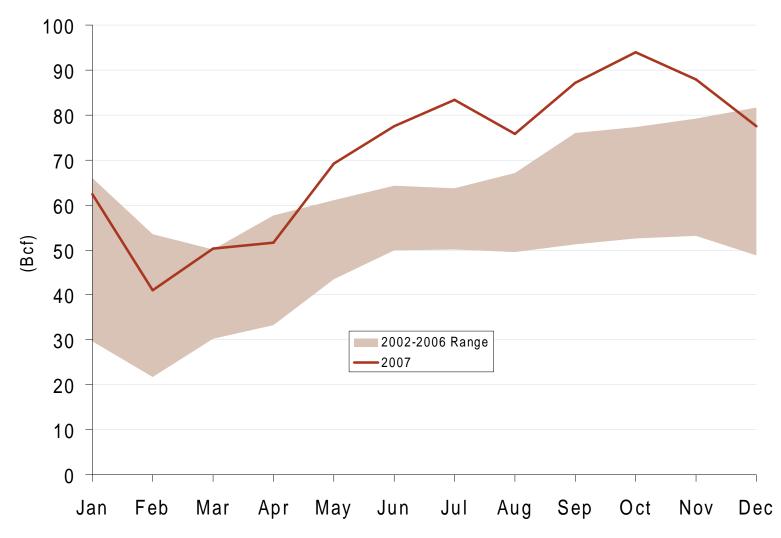
Source: Derived from *Platts* and *ICE* data.

# Published and Traded Daily Spot Volumes at Transco Zone 3



Source: Derived from Platts and ICE data.

## **Southeast Regional Storage Inventory Levels**



Source: Derived from EIA data.

# **Pipeline Projects**

| Pipeline Projects                  |                          |                   |                             |                    |                      |       |
|------------------------------------|--------------------------|-------------------|-----------------------------|--------------------|----------------------|-------|
| Company                            | Project Name             | Capacity<br>(Bcf) | Capital Cost<br>(Millions)+ | Status             | Year<br>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                     | Under Construction | 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                     |                    |                      |       |

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

# **Storage Projects**

| Storage Projects                |                                  |                   |                            |                                |                       |                      |       |
|---------------------------------|----------------------------------|-------------------|----------------------------|--------------------------------|-----------------------|----------------------|-------|
| Company                         | Project Name                     | Capacity<br>(Bcf) | Deliverability<br>(MMcf/d) | Capital<br>Cost<br>(Millions)+ | Status                | Year<br>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    |

'+ Capital cost figures are estimates.

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# **LNG Projects**

| LNG Projects             |  |                   |                     |                 |                      |       |
|--------------------------|--|-------------------|---------------------|-----------------|----------------------|-------|
| Company                  | Project Name                           | Capacity<br>(Bcf) | Send-out<br>(Bcf/d) | Status          | Year<br>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 | State Total | 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.

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

|                |             |            |            | Vehicle | Electric  | Other     |             | % of | % of   |
|----------------|-------------|------------|------------|---------|-----------|-----------|-------------|------|--------|
| Sector         | Residential | Commerical | Industrial | Fuel    | Power     | Fuel      | State Total | 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.

Note: Units equal millions of cubic feet. Other Fuel consists of Lease Fuel, Plant Fuel, and Pipeline & Distribution use. Updated January 10, 2007

# **Natural Gas Production by State**

| Dry Production | 2004       | 2005       | Yearly<br>Change |      | 2005 % of 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   | Salt     |          |           |          | Depleted  |        |           |          |        |             |
|-----------------|--------|----------|----------|-----------|----------|-----------|--------|-----------|----------|--------|-------------|
|                 | Dome   | Dome     |          | Aquifers  | Depleted | Fields    | Total  | Total     | % of US  | % of   | Dry Proved  |
| Field Type      | Fields | Capacity | Aquifers | Capacity  | Fields   | Capacity  | Fields | Capacity  | Capacity | Region | Reserves    |
| 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.