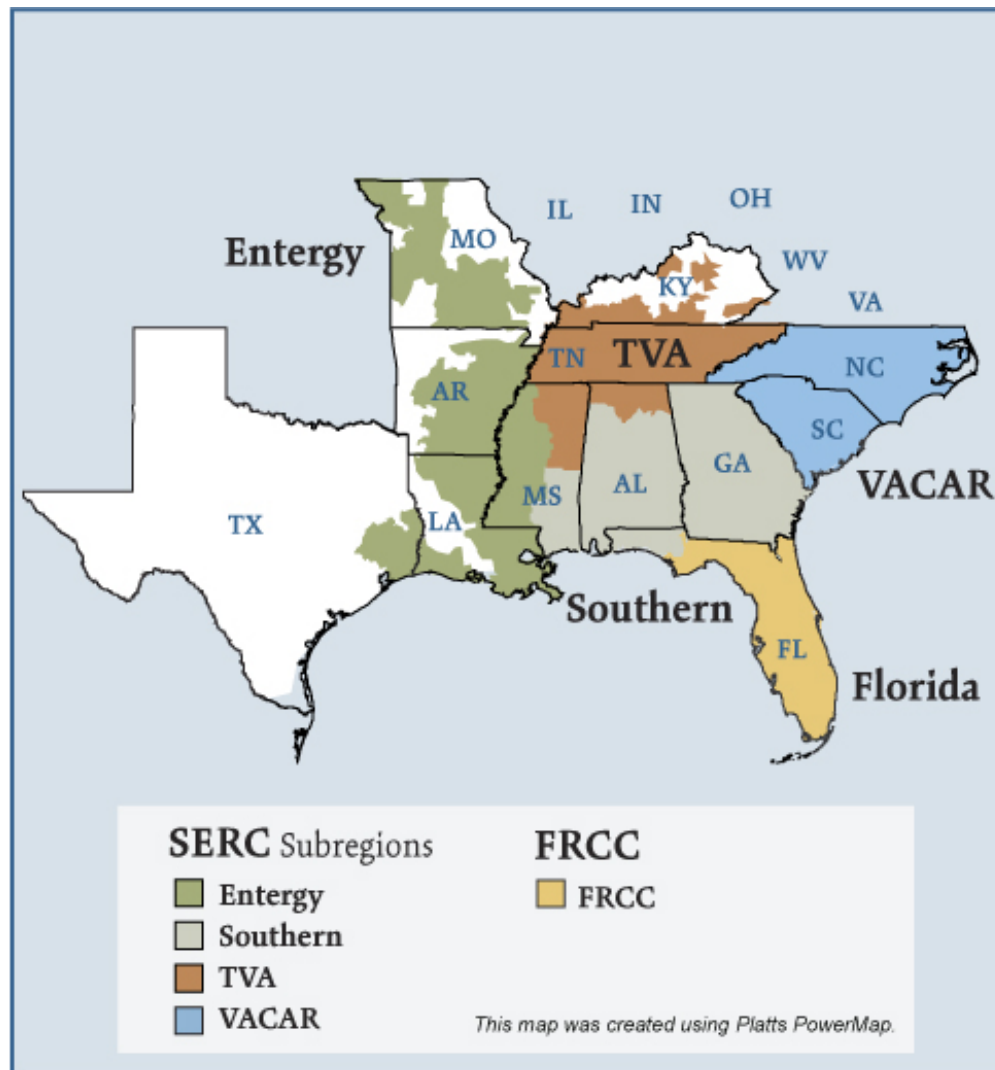


## Southeast Electric Regions



## Overview

### Market Description

Florida Reliability Coordinating Council (FRCC) and SERC Reliability Corporation (SERC) reliability regions minus the portions of SERC in the Midwest ISO (MISO) and in PJM.

### Geography

States covered: All or most of Florida, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Tennessee, North Carolina, South Carolina and parts of Missouri, Kentucky and Texas.

Reliability region: Southeastern Electric Reliability Council (SERC) and Florida Reliability Coordinating Council (FRCC)

Balancing authorities: See list on page 5 and 6.

Hubs: Entergy, Southern, TVA

### RTO/ISO

None

### Generation/Supply

Marginal fuel type: Coal and natural gas

Generating capacity (summer 2006): 299,712 MW

Capacity reserve (summer 2006): 64,188 MW

Reserve margin (summer 2006): 27%

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

**Demand**

All time peak demand: 237,100 MW (2005)

In summer of 2006, demand in parts of the region, such as the Southern Company service area, reached record levels on several occasions due to extremely hot weather.

Peak demand growth: -0.6% (2005–2006)

Summer Peak Demand (MW): 237,100 (2005) 235,524 (2006)

*Source:* Derived from *SERC* and *FRCC* data and discussions.

**Prices**

Annual Average of Daily Bilateral Day Ahead On-Peak Prices

Platts “Into Southern” Index

2004: \$48.64/MWh

2005: \$70.90/MWh

2006: \$56.11/MWh

Prices increased in 2005 as a result of disturbances to the natural gas market. Prices declined in 2006 as natural gas storage levels remained above historical ranges throughout the injection season (April through October).

**Interconnections/Seams**

Coming soon

## Focal Point

**Florida Power Demand:** Power demand in peninsular Florida grew 4.3% per annum in the four years ending 2005, compared to the United States average of 2.6%, according to EIA statistics. The state's utilities have increasingly relied on gas-fired generation, which produced 33% of 2005 electricity output and is projected to hit 44% in 2015. The Florida Public Service Commission has noted that this trend could increase both reliability and pricing risks.

**Drought Affects Hydro:** A continued drought in the Southeast has left hydroelectric facilities with significantly lower water levels going into this summer than in previous years. For example, Southern Company expects its hydroelectric facilities to have decreased capacity of almost 1,600 MW, down almost 70% from its normal hydro capacity.

**New Nuclear Capacity:** The Tennessee Valley Authority (TVA) returned its nuclear plant Browns Ferry Unit 1 to operation on May 21, 2007 after over 20 years of inactivity. The Browns Ferry Nuclear Plant located outside of Huntsville, Alabama is made up of two nuclear units that were first put into operation in 1977. Since 1985, however, Unit 1 has been idle. Because of increased electric demand within TVA, the TVA Board voted in 2002 to restart the unit at a cost of \$1.8 billion. Browns Ferry Unit 1 will provide an additional 1,100 MW of capacity.

## Balancing Authorities in the Southeast Electric Market

### Regional Reliability Council and Balancing Authority

### NERC Acronym

#### FRCC

City of Homestead	HST
City of Tallahassee	TAL
Florida Municipal Power Pool	FMPP
Florida Power & Light	FPL
Florida Power Corporation	FPC
Gainesville Regional Utilities	GVL
JEA (Jacksonville)	JEA
Reedy Creek Improvement District	RC
Seminole Electric Cooperative	SEC
Tampa Electric Company	TEC
Utilities Commission, City of New Smyrna Beach	NSB

#### SERC

Alabama Electric Cooperative, Inc.	AEC
Associated Electric Cooperative, Inc.	AECI
Batesville Control Area	BCA
Big Rivers Electric Corp.	BREC
CECD, LLC - Conway	CNWY
Progress Energy Carolinas - EAST	CPLE
Progress Energy Carolinas - WEST	CPLW
DECA, LLC - North Little Rock	DENL
DECA, LLC - Ruston	DERS
Duke Power Company	DUK
Electric Energy, Inc.	EI
Entergy Services, Inc.	EES
East Kentucky Power Cooperative, Inc.	EKPC
Louisiana Generating, LLC	LAGN
Union Power Partners, LLC	PUPP
South Carolina Public Service Authority (Santee Cooper)	SC
South Carolina Electric & Gas Company	SCEG
Southeastern Power Administration - Hartwell	SEHA
Southeastern Power Administration - Russell	SERU
Southeastern Power Administration - Thurmond	SETH
South Mississippi Electric Power Association	SMEE
Southern Company Services, Inc.	SOCO
Tennessee Valley Authority	TVA
CECD, LLC - West Memphis	WMUC
Alcoa Power Generating, Inc. - Yadkin Division	YAD

The following SERC balancing authorities are members of MISO and are included in the Midwest electric market:

Ameren Transmission	AMRN
Illinois Power Co.	IP
Central Illinois Light Co	CILC
Southern Illinois Power Cooperative	SIPC
Columbia Water & Light	CWLD

PJM Interconnection balancing authority for Dominion and is included in the PJM electric market.

**Source:** [WWW.TSIN.com](http://WWW.TSIN.com)  
([ftp://www.nerc.com/pub/sys/all\\_updl/oc/opman/ctrlareg.pdf](ftp://www.nerc.com/pub/sys/all_updl/oc/opman/ctrlareg.pdf))

## Supply and Demand Statistics for the Southeast

Supply Demand Statistics			
	2004	2005	2006
Summer Generating Capacity MW	272,604	297,221	299,712
Summer Peak Demand MW	220,299	237,100	235,524
Summer Reserves MW	52,305	60,121	64,188
Summer Reserve Margin:	24%	25%	27%
Annual Load (GWh):	1,077,069	1,188,598	1,205,776

Source: Derived from SERC "Reliability Corporation Information Summary," July 2006; "Reliability Review Subcommittee's 2006 Report to the SERC Engineering Committee", "Reliability Review Subcommittee's 2005 Report to the SERC Engineering Committee", and FERC staff discussions with SERC and FRCC

Corrected March 31, 2007

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## Yearly Average of Bilateral DA Prices – On-Peak

<b>Annual Average Day Ahead Prices (\$/MWh)</b>			
	<b>2005</b>	<b>2006</b>	<b>5 Years</b>
Florida	\$85.03	\$64.75	\$59.98
TVA	\$67.39	\$53.97	\$46.31
Southern	\$70.90	\$56.11	\$49.37
Entergy	\$69.90	\$56.76	\$48.43

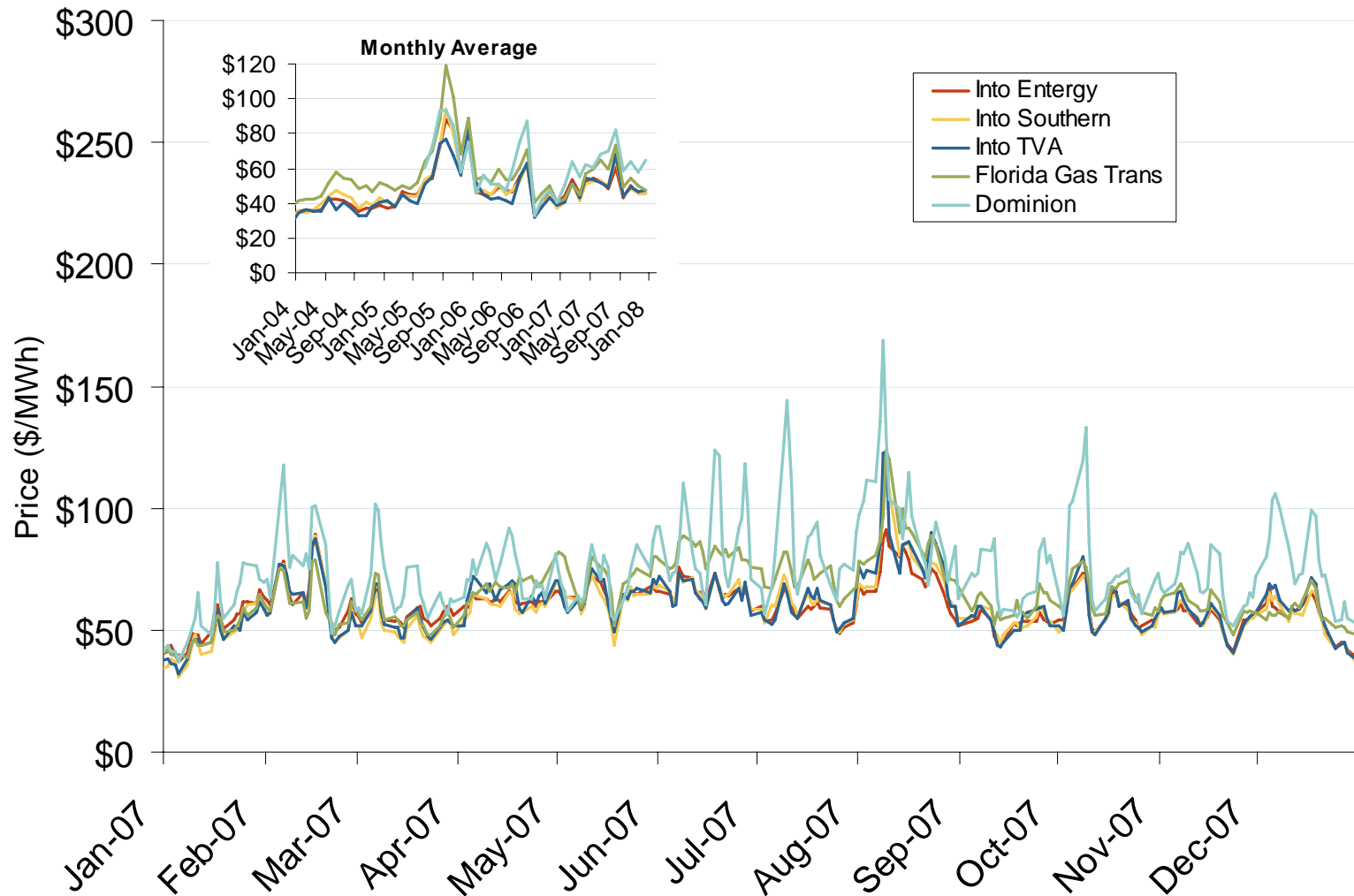
Source: Derived from *Platts* data.

Updated February 2, 2007

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# Southeastern Daily Bilateral Day-Ahead On-Peak Prices

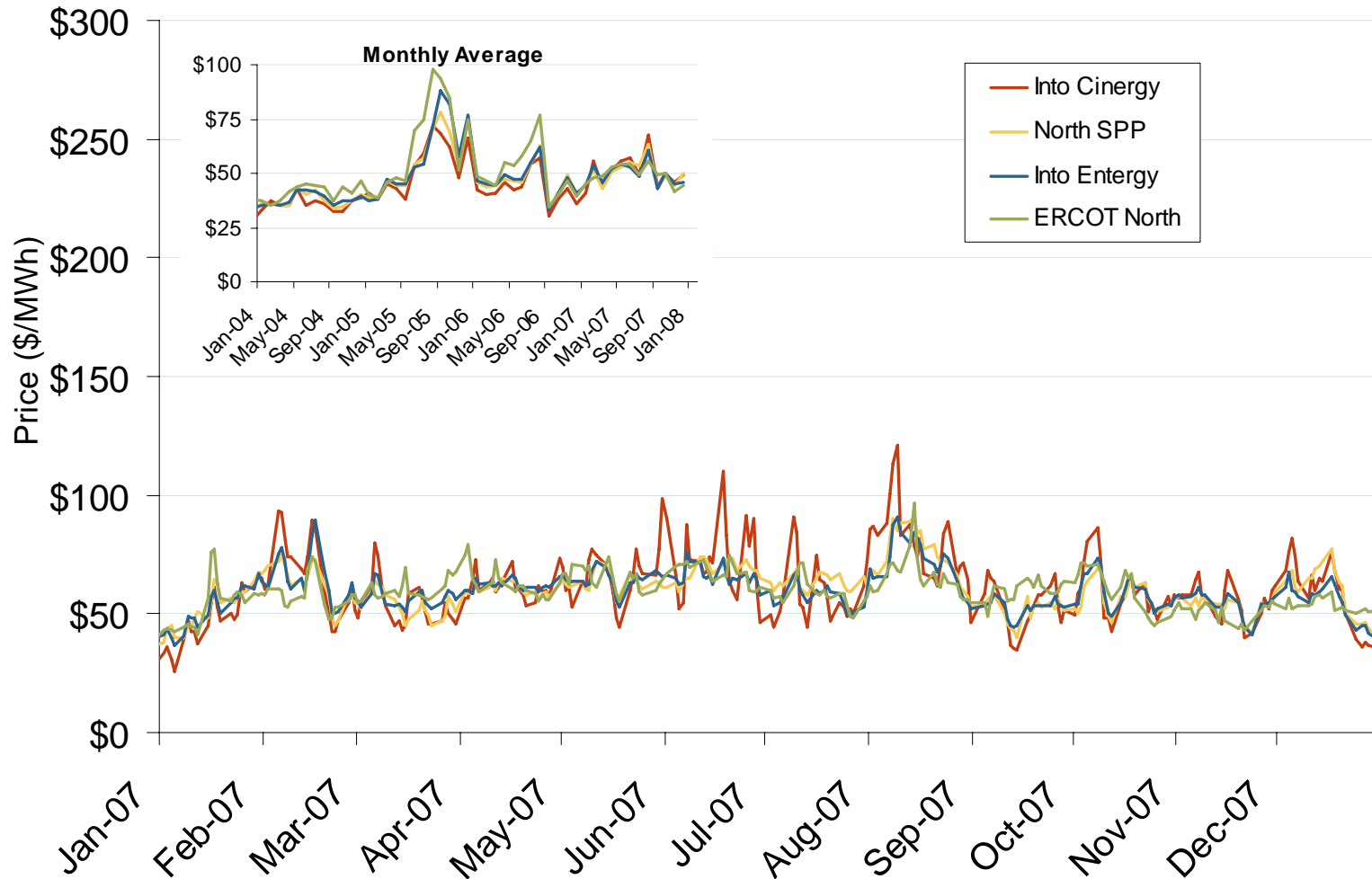


Source: Derived from *Platts* data.

Updated January 9, 2008

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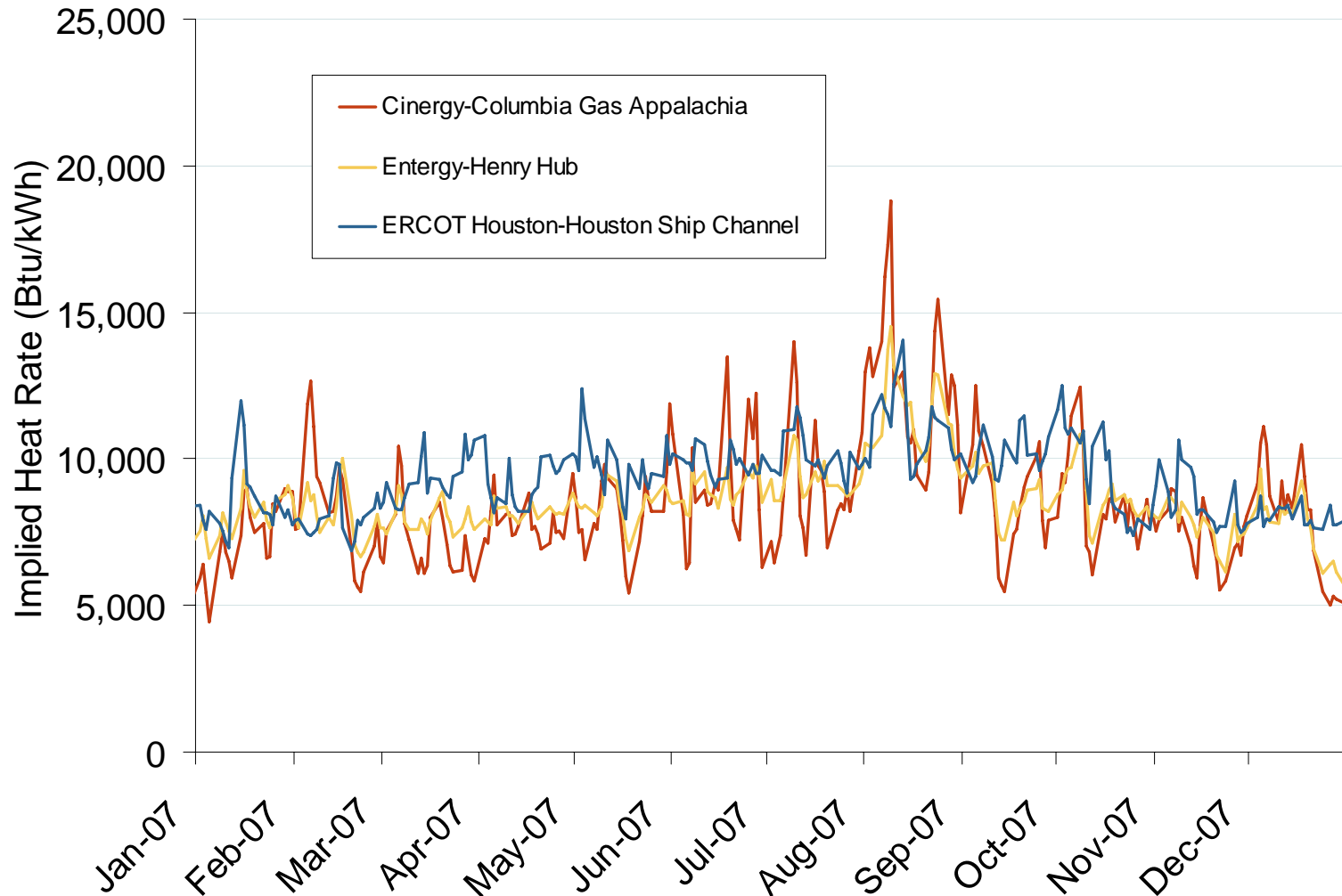
# Midwestern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

Updated January 9, 2008

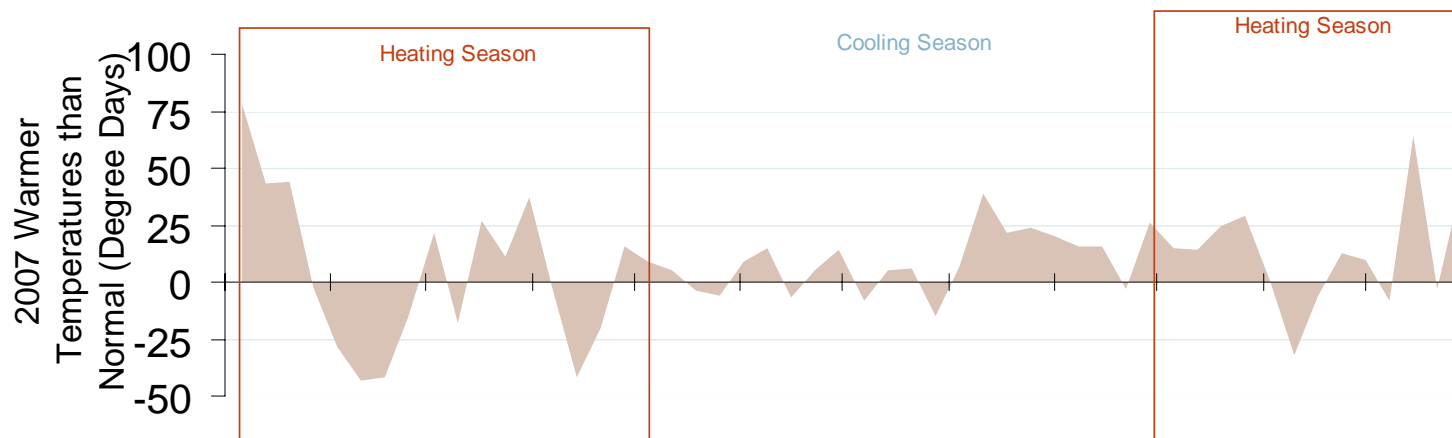
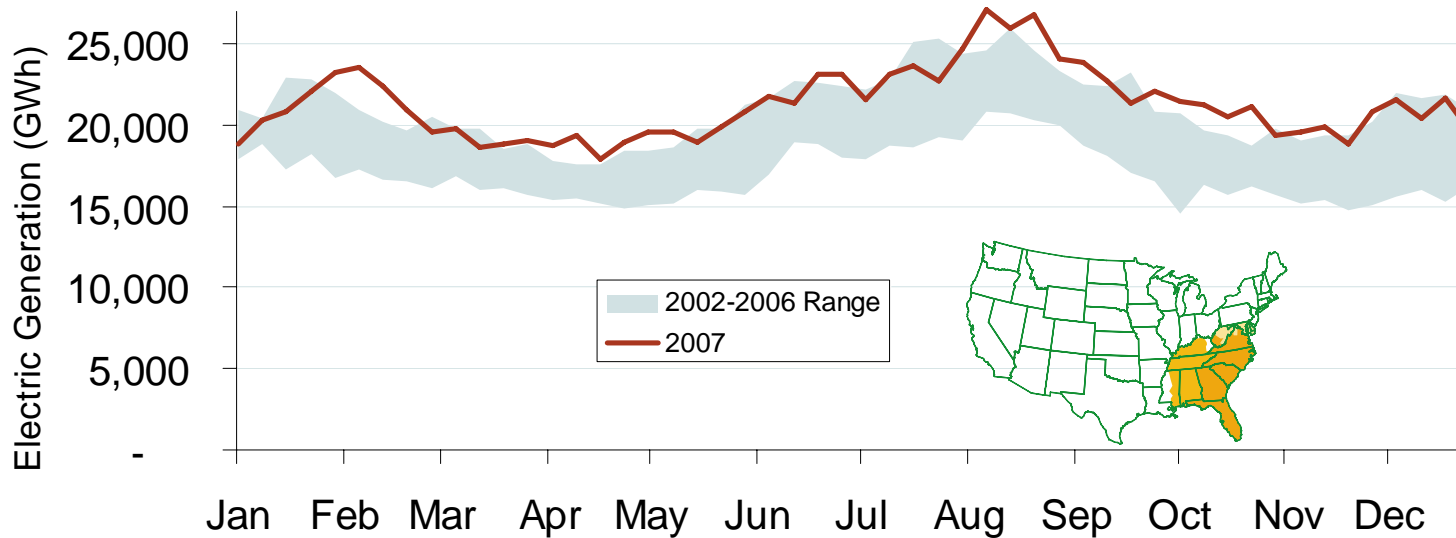
## Implied Heat Rates at South Central Trading Points



Source: Derived from *Platts* data

Updated January 9, 2008

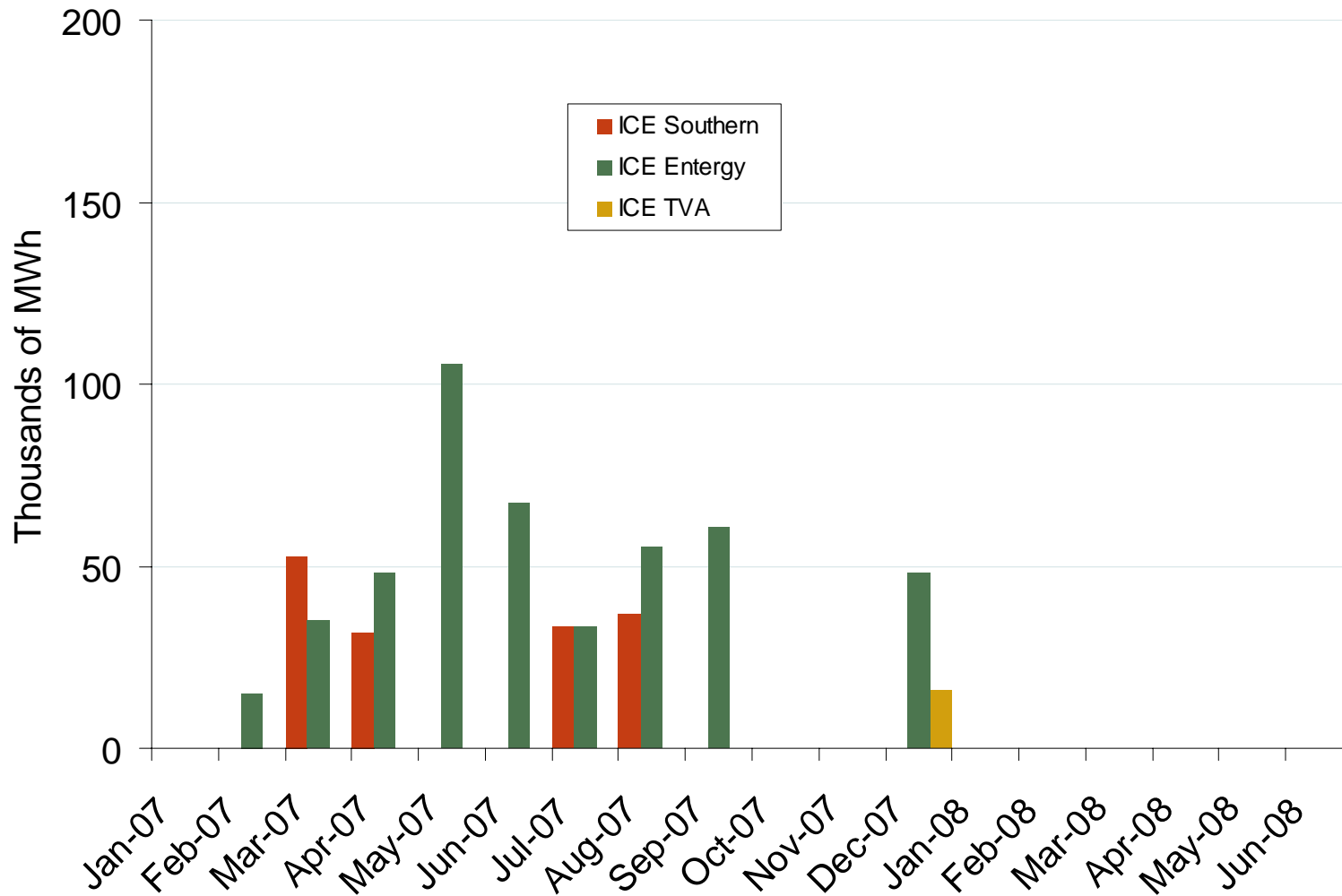
# Weekly Electric Generation Output and Temperatures Southeast Region



Source: Derived from EEI and NOAA data.

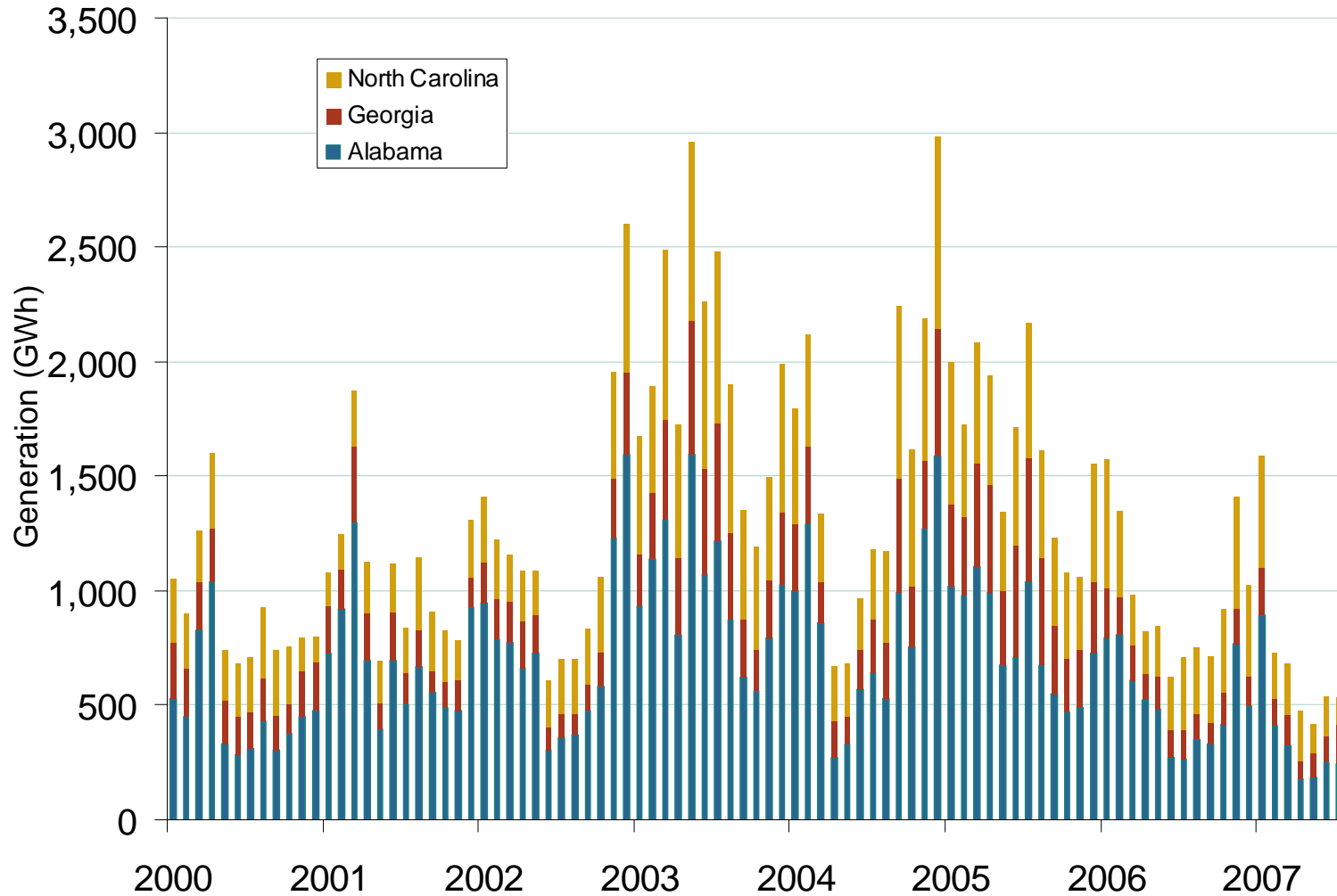
Updated January 9, 2008

## Southeast Forward Volumes



Source: Derived from ICE data. ICE on-peak forward (physical) volumes are for Entergy, Southern and TVA and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month.

# Monthly Southeastern Hydroelectric Generation



Source: Derived from EIA and EPA data.

Updated December 7, 2007