Competition in Natural Gas

Georgia Natural Gas

Competition and Deregulation Act

1998 to 2015

Presented to the

NARUC Committee on Gas

November 9, 2015
Overview

• What forces influenced the Georgia approach to customer choice?
• How did Georgia introduce competition into the residential market?
• What factors drove the market?
• How does Georgia compare with other jurisdictions?
• What have we learned that may have applications elsewhere?
Status of Early Restructuring Programs in the U.S.

- In the years leading up to AGL’s unbundling, there had been a steady increase in the number of gas and electric restructuring initiatives across the nation.
- Similar initiatives were undertaken in other nations as well.
- Although the initial efforts targeted industrial and large commercial programs, the trend shifted in the mid 1990s for restructuring programs to offer unbundled services to all customers.
- By 2000, virtually all U.S. jurisdictions had undertaken initiatives on utility restructuring, and 24 jurisdictions had undertaken initiatives on natural gas restructuring at the residential level.
- In 1998, the year in which AGL’s program was underway, more than 80% of all natural gas sold in the U.S. could be sold through choice programs, and 61% of all natural gas was sold through choice programs.
- Nonetheless, virtually all of the “choice program” volumes were to non-residential customers.
Status of Early Restructuring Programs in the U.S.

Actual and Estimated Potential
Customer Choice Natural Gas Volumes, 1998

- **Electric Generation**
  - Purchased from LDC: 99%
  - Purchased from Marketers: 1%
  - Choice: 1%
  - Merchant: 3258 Bcf
  - Ineligible: 99%
  - Eligible: 9%

- **Residential**
  - Purchased from LDC: 69%
  - Purchased from Marketers: 31%
  - Choice: 4520 Bcf
  - Merchant: 3%
  - Ineligible: 97%
  - Eligible: 96%

- **Commercial**
  - Purchased from LDC: 65%
  - Purchased from Marketers: 35%
  - Choice: 2999 Bcf
  - Merchant: 97%
  - Ineligible: 2%
  - Eligible: 91%

- **Industrial**
  - Purchased from LDC: 9%
  - Purchased from Marketers: 91%
  - Choice: 8686 Bcf
  - Merchant: 1%
  - Ineligible: 4%
  - Eligible: 96%
Actual and Estimated Potential Customer Choice Natural Gas Volumes, 1998

<table>
<thead>
<tr>
<th>End Use</th>
<th>Total Gas Use</th>
<th>Gas Utility Sales</th>
<th>Actual Customer Choice Volumes</th>
<th>Minimum Potential Customer Choice Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Utility</td>
<td>3,258</td>
<td>415</td>
<td>2,843</td>
<td>3,231</td>
</tr>
<tr>
<td>Industrial</td>
<td>8,686</td>
<td>797</td>
<td>7,889</td>
<td>8,364</td>
</tr>
<tr>
<td>Commercial</td>
<td>2,999</td>
<td>1,958</td>
<td>1,041</td>
<td>2,064</td>
</tr>
<tr>
<td>Residential</td>
<td>4,520</td>
<td>4,393</td>
<td>127</td>
<td>2,026</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>19,463</strong></td>
<td><strong>7,563</strong></td>
<td><strong>11,900</strong></td>
<td><strong>15,688</strong></td>
</tr>
</tbody>
</table>


Customer Choice is defined as natural gas that is purchased from a source other than the local gas utility.

“Minimum Potential Customer Choice Volumes” are AGA estimates of the minimum volumes that customers could purchase from sources other than gas utilities.
61% of all Gas Delivered in 1998 was sold by someone other than the local natural gas distribution company.

11,900 Bcf of the year’s 19,463 Bcf were allocated as follows:

- Residential -- 127 Bcf (1%)
- Commercial -- 1,041 Bcf (9%)
- Industrial -- 7,889 Bcf (66%)
- Electric Generation -- 2,843 Bcf (24%)

But, virtually all (99%) of the “choice program” volumes were to non-residential customers.
As of the time AGL implemented customer choice:
States with the higher average gas bills tended to be more unbundled

- 87% of “high” bill states were unbundled or had large pilot programs
- 31% of “low” bill states were unbundled or had large pilot programs
- Georgia was an exception - complete unbundling with relatively low consumer bills

Moreover, AGL Resources Inc. and its subsidiary, Atlanta Gas Light Company, were among the advocates for the Georgia Legislation

WHY?
Federal Regulatory Changes

Federal Restructuring Worked

Residential Gas Consumers

Small Commercial & Industrial Gas Consumers

Large Commercial & Industrial Gas Consumers

PRODUCERS

PIPELINES

DEDICATED SUPPLY

TAKE OR PAY

OBLIGATION TO SERVE

MINIMUM BILL

LDC
Federal Restructuring Worked

Federal Regulatory Changes

FERC ORDER 451
DEDICATED SUPPLY

FERC ORDER 436

FERC ORDER 500
TAKE OR PAY

FERC ORDER 636
OBLIGATION TO SERVE

FERC ORDER 380
MINIMUM BILL

LDC

Residential Gas Consumers

Small Commercial & Industrial Gas Consumers

Large Commercial & Industrial Gas Consumers

Arcadian and other decisions
Federal Restructuring Worked

Historic Transaction Structure

- Gas Producers
- Interstate Pipeline Companies
- Local Distribution Companies
- Residential Gas Consumers
- Small Commercial & Industrial Gas Consumers
- Large Commercial & Industrial Gas Consumers
Federal Restructuring Worked

Intermediate Transaction Structure

- Gas Producers
- Interstate Pipeline Companies
- Local Distribution Companies
- Gas Marketers & Brokers
- Residential Gas Consumers
- Small Commercial & Industrial Gas Consumers
- Large Commercial & Industrial Gas Consumers
Intermediate Transaction Structure

- Gas Producers
- Interstate Pipeline Companies
- Local Distribution Companies
- Gas Marketers & Brokers
- Residential Gas Consumers
- Small Commercial & Industrial Gas Consumers
- Large Commercial & Industrial Gas Consumers
When we say that “Federal Restructuring Worked”

1. Prices generally were lowered by effective competition

2. Price signals from the burner tip were almost immediately felt at the wellhead

But, large commercial and industrial customers were the primary beneficiaries of the federal restructuring
Natural Gas Industry Overview

Average Total Delivered Cost Per Therm Of Natural Gas In Georgia

- Residential & Small Business (more than 1.2 million Customers)
- Large Industrial (about 650 Customers)
Change in Total Delivered Cost of Natural Gas to Georgia Customers from 1983 to 1995

-39% for Large Industrial Customers
+13% for Residential and Small Business Customers

The “Gas Gap”
Q: Would restructuring LDCs provide similar benefits?
Q: Would restructuring LDCs provide similar benefits?
Q: Would restructuring LDCs provide similar benefits?

Diagram showing gas market participants:
- Gas Producers
- Interstate Pipeline Companies
- Local Distribution Companies
- Gas Marketers & Brokers
- Transportation
- Storage & Peaking
- Residential Gas Consumers
- Small Commercial & Industrial Gas Consumers
- Large Commercial & Industrial Gas Consumers
Background of the 1997 Legislation

- By 1993-94, the historic price advantage of natural gas over competing fuels was at risk of being eroded.
- The sale of natural gas (as contrasted with the delivery of natural gas) was characterized by asymmetric regulatory risk.
- Public Service Commissions throughout the U.S. had been slow to grant LDCs sufficient flexibility to meet the competitive options available to end-use customers.
- AGL had been in rate cases almost every year for about a dozen years.
- Proposed legislation in 1996 led to formation of a legislative study committee; the study committee’s recommendations led to the 1997 Natural Gas Competition and Deregulation Act.
Georgia’s Natural Gas Competition and Deregulation Act

• Opens access and unbundles gas services on the local gas company’s system, creating a secondary market for interruptible delivery capacity

• Transforms the local gas company into a “pipes” business (delivering gas but not selling gas commodity) by filing notice with the PSC to become an “electing distribution company”

• Requires certification by the PSC for marketers before they sell gas to small business and residential customers

• Ensures an orderly transition from regulation to competition

• Continues regulation by the PSC of safety, access and firm delivery service, and set rates pursuant to an alternative form of regulation

• Expands jurisdiction and power of PSC to enforce fair marketing rules

• Ensures consumer safeguards and protection

• Creates a Universal Service Fund
Georgia’s Unbundling Model in a Nutshell

- LDC may elect to unbundle services, and thus become an Electing Distribution Company (EDC)
- Regulation phases out as competition increases
- Rights to assets are allocated to marketers based on the firm customers they serve
- A secondary market is created for unused firm capacity to serve interruptible customers
- Eventually, firm customers who do not select a marketer will be assigned to one
- The pipes company remains regulated; marketers are not price regulated
LDC’s Election Filing Under Georgia’s Model

Based on AGL’s Election Filing of 11/26/97

Part 1: Traditional Rate Case Elements

Part 2: Performance-Based Regulation

Part 3: Election to Unbundle Services

Traditional Rate Case
Provides a “bottoms-up” starting point for unbundled services

Contains all base revenue issues of a normal LDC rate case, including:
- Capital Cost
  - Capital Structure
  - Cost of Debt
  - Return on Equity
- O & M Requirements
- Plant in Service Requirements
- Depreciation Rates
- Cost Allocation & Rate Design
- Others

Performance-based Regulation
Contains both
- Specific performance incentives and
- Comprehensive performance-based regulation proposals

Election to Unbundle Services
- Unbundles all functions that can be separated from actual distribution
- Method to Allocate Intrastate Assets and Establish Delivery Groups
- Method to Allocate Interstate Assets
- Establish the Electronic Bulletin Board
- Establish a Transition Tracker
- Establish a Universal Service Fund
- Offer Ancillary Services
## Phases of Georgia Gas Restructuring*

<table>
<thead>
<tr>
<th>Description</th>
<th>Dates and duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 0: LDC election and marketer certification</strong></td>
<td>AGLC files an election rate case and marketers (unregulated providers) file petitions for certification to compete.</td>
</tr>
<tr>
<td><strong>Phase 1: Competition begins</strong></td>
<td>Customers have the option of choosing an unregulated gas provider; customers who do not select a marketer remain with AGLC.</td>
</tr>
<tr>
<td><strong>Phase 2: Forced assignment</strong></td>
<td>Customers are notified that they must choose a marketer within 100 days or they will be randomly assigned one within 20 days thereafter.</td>
</tr>
<tr>
<td><strong>Phase 3: Full-scale competition</strong></td>
<td>Customers will be free to switch suppliers, constrained only by the terms and conditions of their agreements with new unregulated providers.</td>
</tr>
</tbody>
</table>

* Mandated assignment: customers who have not chosen a marketer are assigned to marketers according to each marketer’s share of customers who have chosen; AGL exits the merchant function entirely.

* Completed independently for each of Georgia’s 9 delivery groups.
Goals of Georgia Gas Restructuring*

1. Promote competition in the natural gas industry;
2. Protect the consumer during and after the transition to a competitive natural gas market;
3. Maintain and encourage safe and reliable natural gas service;
4. Deregulate those components of the natural gas industry subject to actual competition;
5. Continue to regulate those natural gas services subject to monopoly power;
6. Promote an orderly and expeditious transition of the natural gas industry toward fully developed competition;
7. Provide for an orderly and expeditious transition of the natural gas industry toward fully developed competition;
8. Provide for ratemaking methods which the General Assembly finds appropriate for the provision of natural gas services, including without limitation the use of straight fixed variable rate design, the recovery of certain stranded costs, and the use of alternative forms of rate regulation;
9. Allow gas companies the opportunity to compete effectively in a competitive marketplace; and

*O.C.G.A. § 46-4-151
1. Emphasize the importance of residential and small commercial customers.

Ensure that appropriately robust consumer safeguards are in place and enforced.
2. Allow competition where a particular product or service is competitive or highly contestable.

**Competitive** markets are characterized by: multiple sellers; multiple buyers; market share sufficiently distributed among the sellers such that none of the market participants can set prices for anything other than their own products; an essentially equivalent commodity being sold; market transparency; and market contestability.

**Contestable** markets may achieve the same result, with fewer market participants, because the barriers to entry are relatively low, thus allowing new entrants into the market if the existing group of providers fail to meet the customers’ needs and expectations.

Potential **Market Entry Barriers** potentially include: access to interstate transportation and out-of-state storage; access to interstate transportation and storage capacity, access to peaking services, ability to provide ancillary services, capital requirements, and requirements for a workforce with appropriate technical abilities.
3. Continue (or revise) regulation where products and services are not competitive or contestable, or where required for safe operation.

<table>
<thead>
<tr>
<th>Services Integral to Safe, Reliable Service</th>
<th>Service Performed by Company or Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services included in base rates</td>
<td>Service with no competitive supplier currently</td>
</tr>
<tr>
<td>Ex. Leak calls</td>
<td>Ex. Behind the City Gate Peaking</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Service priced separately</td>
<td>Competitive Services</td>
</tr>
<tr>
<td>Ex. Service Establishment</td>
<td>Ex. Billing, meter reading</td>
</tr>
</tbody>
</table>

The approach to regulation and ratemaking should depend on the category.
Guiding Principles for Restructuring

4. Allow Marketers an opportunity to offer products and services that consumers value.

Consumers Value:

- Cost
- Choice
- Convenience
- Control
Why Unbundle LDC Services?

Participants seek very different results.

Customer Choice Proponents
- Choice
- Control
- Convenience
- Cost

Local Distribution Companies
- Address regulatory shortcomings
- Avoid Asymmetrical Risks of Merchant Role

Potential Marketers
- Access to new markets and new customers
- Ability to leverage existing assets

Unbundling is a tool, not a goal, not an objective.
Lessons Learned

A. The extent to which potential benefits are achievable

1. Customer Choice Proponents
   - The 4 Cs (Choice, Control, Convenience and Cost) can be achieved, but are not assured
   - Based on choices in the marketplace, Customers value factors other than cost

2. LDCs
   - Regulation of the LDC continues, unbundled or not
   - Merchant-related asymmetrical risk continues as long as any regulated merchant role continues
   - LDCs should seek other avenues to address regulatory issues

3. Potential Marketers
   - More marketers fail than succeed
   - Marketers can successfully add value
Lessons Learned

B. Costs associated with the benefits obtained

1. Customer Choice Proponents
   - Total customer bills may exceed regulated costs
   - Convenience may be compromised by forced actions

2. LDCs
   - Much more complex business model
   - Potential for stranded costs; mismatch of avoided costs to avoided revenues
   - Transformation of required workforce skill sets

3. Potential Marketers
   - Substantial investment required to achieve market presence
   - Multiple “incumbent” participants complicate customer choices
   - Regulatory risks compound business risks
Lessons Learned

C. Challenges to service reliability and operational integrity

- It is difficult to balance between setting marketer qualification:
  - too stringent (which tends to limit “scrappers”) and
  - too lenient (which can jeopardize system operations)
- If any one marketer fails to meet daily delivery requirements, the entire system may be compromised
- Some marketers appear to have realized substantial income from knowing and fully applying system rules governing supply imbalances and make-up provisions
- In Georgia alone, nearly 30 marketers did not sustain a position in the market *
- It is critical that the LDC have business rules in place to maintain system control and to ensure that marketers view compliance as the preferred business option

* Southeastern States Energy (also filed bankruptcy); KeySpan; A C N Energy; Williams Energy Services Co.; Volunteer Energy Services, Inc.; Valdosta Natural Gas Services, Inc.; PanCanadian Energy Services; Optimum Energy Services, Inc. (dba Peachtree also filed bankruptcy); (Shell purchased Peachtree’s customers); DukeSolutions; FPL Energy Services; UtiliCorp Energy Solutions (certificate revoked); Titan Energy (also known as United Gas Management filed for bankruptcy); Phelts Natural Gas Associates; The New Power (also filed for bankruptcy); Columbia Energy Services (transferred customers to New Power); Texas-Ohio Gas (dba e Prime); NorAm Energy Management (changed name to Reliant Energy); Duke Energy And Trading and Marketing; Southern Company Gas (purchased New Power’s customers); Energy America (sold their customers to SCANA); Vectren Retail (transferred customers to Gas South); Usave Catalyst (also filed bankruptcy); Dominion Retail; Shell (transferred customers to MXEnergy); Utility Resource Solutions (became Spark Energy); Constellation NewEnergy-Gas; PSEnergy Group dba GasKey (transferred customers to MXEnergy); and SONAT Energy Inc.
Common Program Issues

A. Defining and staging eligible customers
B. LDC’s Merchant Function
C. Ancillary Services
D. Access to Customer Information
E. Customer Education
F. Upstream Assets
G. Rules Governing the Unbundled Market
H. Default Provider and Provider of Last Resort
I. Conversion of Legacy Systems
J. Transitional Costs and Revenues
Customers have had the opportunity to pay less for gas after competition began than they did in the year prior to competition. Nonetheless, customer choice participants also have had the opportunity to pay more for gas since restructuring. Deregulation has produced choices for end-use customers. There has been a wide range of pricing options available. In most months, significant savings could be realized by end-use customers who made prudent choices in the restructured market. During the period shortly following the Georgia restructuring, the median marketer price was below the regulated PGA price about 75% of the time. It was possible to get an unregulated price that was below the regulated price 100% of the time.
Prices Charged by Marketers and AGL’s PGA for Residential Natural Gas Commodity

$(/Dth)

Marketer gas cost based on published rates in the Atlanta Journal & Constitution and/or marketers stated charges for the period from November 98 to October 99.
AGL PGA cost from filings with the GA PSC for the period from November 97 to October 98. AGLC PGA is a 12 month rolling average.
Average Monthly Savings by Marketer

First 9 Months of Customer Choice

Average Monthly Savings

Residential choice customers like having options, and the Market has responded.

November 2015 – 63 Unique Options
November 1998 – 22 Unique Options

Variable Price: No Contract
Fixed Price: 6 Months or Less
8 Months
12 Months
18 Months
24 Months
36 Months

Number of Each Type of Residential Offer
Customers Served by Marketers on AGL’s System

- Customers who were randomly assigned
- Customers who selected a Marketer

1998 | 1999
---|---
0  | 0  
100k | 100k 
200k | 200k 
300k | 300k 
400k | 400k 
500k | 500k 
600k | 600k 
700k | 700k 
800k | 800k 
900k | 900k 
100k | 100k 
110k | 110k 
120k | 120k 
130k | 130k 
140k | 140k 
150k | 150k
Percentage of End-use Customers Who Selected a Marketer Within 10 Months

Residential

Firm Industrial and Commercial

AGL
Marketers 81%

AGL
Marketers 64%
If price were the major driver of consumer behavior:

We would expect to see higher discounts = higher market share.
Average Monthly Savings vs. Market Share

Based on data published in the *Atlanta Journal - Constitution*
Observations That May Apply Elsewhere

- Successful implementation requires disciplined continuity by market participants and policy makers.
- Price is not the only consideration for customers choosing a new supplier. COST – CONTROL – CONVENIENCE – CHOICE.
- Different customers have different preferences and responded to different supply offers.
- Creativity is rewarded in the marketplace.
- Customers MAY benefit by:
  - Lower average prices
  - Expanded supply options
  - New suppliers and new service offerings.
Program Features that Define Markets

- What ancillary services to offer
- Rate design considerations
- Role of the LDC regarding the merchant function
- Enhanced consumer protection
- Fair marketing rules
- Upstream assets
- Stranded costs
- Provider of Last Resort
"Bummer of a birthmark, Hal."

From Gary Larson, creator of the comic strip “The Far Side”
Residential Customer Choice Programs: State of the States

High eligibility + High participation (2)
High eligibility + Low participation (11)
Low eligibility + High participation (2)
Low eligibility + Low participation (6)
Exited (4)
Not participating (26)
Residential Customer Choice Programs: State of the States
Residential Customer Choice Programs: Who Participates

- CA (Approximately 20%)
- GA (Approximately 20%)
- OH (Approximately 34%)
- NY (Approximately 13%)
- NM
- PA
- VA
- WY

Other states include DC, FL, IL, IN, KY, MD, MA, MI, NJ, NE, NY, PA, VA, WY.
## States Ranked by Percent of Total Residential Customers Participating

<table>
<thead>
<tr>
<th>STATE CODE</th>
<th>State</th>
<th>Total Residential Natural Gas Consumers</th>
<th>Consumers Eligible to Participate</th>
<th>Participating</th>
<th>% of Total Consumers Eligible</th>
<th>% of Total Consumers Participating</th>
<th>% of Eligible Consumers Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>Georgia</td>
<td>1,739,543</td>
<td>1,420,365</td>
<td>1,418,492</td>
<td>81.65%</td>
<td>81.54%</td>
<td>99.87%</td>
</tr>
<tr>
<td>OH</td>
<td>Ohio</td>
<td>3,244,274</td>
<td>3,125,334</td>
<td>2,493,044</td>
<td>96.33%</td>
<td>76.84%</td>
<td>79.77%</td>
</tr>
<tr>
<td>WY</td>
<td>Wyoming</td>
<td>157,226</td>
<td>69,459</td>
<td>38,318</td>
<td>44.18%</td>
<td>24.37%</td>
<td>55.17%</td>
</tr>
<tr>
<td>NY</td>
<td>New York</td>
<td>4,364,169</td>
<td>3,937,495</td>
<td>913,000</td>
<td>90.22%</td>
<td>20.92%</td>
<td>23.19%</td>
</tr>
<tr>
<td>MD</td>
<td>Maryland</td>
<td>1,078,978</td>
<td>1,058,288</td>
<td>213,605</td>
<td>98.08%</td>
<td>19.80%</td>
<td>20.18%</td>
</tr>
<tr>
<td>MI</td>
<td>Michigan</td>
<td>3,403,694</td>
<td>3,130,495</td>
<td>467,624</td>
<td>91.97%</td>
<td>13.74%</td>
<td>14.94%</td>
</tr>
<tr>
<td>NE</td>
<td>Nebraska</td>
<td>515,336</td>
<td>68,039</td>
<td>68,039</td>
<td>13.20%</td>
<td>13.20%</td>
<td>100.00%</td>
</tr>
<tr>
<td>PA</td>
<td>Pennsylvania</td>
<td>2,678,547</td>
<td>2,530,104</td>
<td>312,940</td>
<td>94.46%</td>
<td>11.68%</td>
<td>12.37%</td>
</tr>
<tr>
<td>DC</td>
<td>District of Columbia</td>
<td>145,938</td>
<td>145,121</td>
<td>16,316</td>
<td>99.44%</td>
<td>11.18%</td>
<td>11.24%</td>
</tr>
<tr>
<td>US</td>
<td>Total</td>
<td>66,624,457</td>
<td>38,222,873</td>
<td>6,758,758</td>
<td>57.37%</td>
<td>10.14%</td>
<td>17.68%</td>
</tr>
<tr>
<td>NJ</td>
<td>New Jersey</td>
<td>2,671,308</td>
<td>2,668,678</td>
<td>203,788</td>
<td>99.90%</td>
<td>7.63%</td>
<td>7.64%</td>
</tr>
<tr>
<td>IL</td>
<td>Illinois</td>
<td>3,878,056</td>
<td>2,924,874</td>
<td>278,200</td>
<td>75.42%</td>
<td>7.17%</td>
<td>9.51%</td>
</tr>
<tr>
<td>VA</td>
<td>Virginia</td>
<td>1,155,636</td>
<td>698,094</td>
<td>67,821</td>
<td>60.41%</td>
<td>8.87%</td>
<td>9.72%</td>
</tr>
<tr>
<td>IN</td>
<td>Indiana</td>
<td>1,673,132</td>
<td>730,906</td>
<td>85,648</td>
<td>43.68%</td>
<td>5.12%</td>
<td>11.72%</td>
</tr>
<tr>
<td>KY</td>
<td>Kentucky</td>
<td>757,790</td>
<td>120,446</td>
<td>26,138</td>
<td>15.89%</td>
<td>3.45%</td>
<td>21.70%</td>
</tr>
<tr>
<td>FL</td>
<td>Florida</td>
<td>687,021</td>
<td>16,552</td>
<td>15,393</td>
<td>2.41%</td>
<td>2.24%</td>
<td>93.00%</td>
</tr>
<tr>
<td>CA</td>
<td>California</td>
<td>10,681,916</td>
<td>10,239,304</td>
<td>137,155</td>
<td>95.86%</td>
<td>1.28%</td>
<td>1.34%</td>
</tr>
<tr>
<td>MT</td>
<td>Montana</td>
<td>259,957</td>
<td>186,237</td>
<td>469</td>
<td>71.64%</td>
<td>0.18%</td>
<td>0.25%</td>
</tr>
<tr>
<td>MA</td>
<td>Massachusetts</td>
<td>1,447,947</td>
<td>1,418,176</td>
<td>2,015</td>
<td>97.94%</td>
<td>0.14%</td>
<td>0.14%</td>
</tr>
<tr>
<td>CT</td>
<td>Connecticut</td>
<td>504,138</td>
<td>1,039</td>
<td>469</td>
<td>0.21%</td>
<td>0.09%</td>
<td>45.14%</td>
</tr>
<tr>
<td>LA</td>
<td>Louisiana</td>
<td>963,082</td>
<td>556</td>
<td>225</td>
<td>0.06%</td>
<td>0.02%</td>
<td>40.47%</td>
</tr>
<tr>
<td>NM</td>
<td>New Mexico</td>
<td>561,713</td>
<td>468,454</td>
<td>59</td>
<td>83.40%</td>
<td>0.01%</td>
<td>0.01%</td>
</tr>
<tr>
<td>CO</td>
<td>Colorado</td>
<td>1,659,808</td>
<td>1,217,972</td>
<td>-</td>
<td>73.38%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>MN</td>
<td>Minnesota</td>
<td>1,445,905</td>
<td>747,266</td>
<td>-</td>
<td>51.68%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>RI</td>
<td>Rhode Island</td>
<td>228,487</td>
<td>228,487</td>
<td>-</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>WI</td>
<td>Wisconsin</td>
<td>1,681,001</td>
<td>1,071,132</td>
<td>-</td>
<td>63.72%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Source: Energy Information Administration 2014 Annual Report (based on 2013 Annual Data)
Competition in Natural Gas

Georgia Natural Gas
Competition and Deregulation Act
1998 to 2015