# 2023- 2024 Georgia Peak Day

Southern - Columbus, GA
Tuesday, January 16, 2024

| Peak Day Stats | |
|---|---|
| EDD = | 43 |
| MCF = | 44,134 |
| DTH = | 45,828 |
| BTU Factor = | 1.038 |

| Supply Utilized - DTH | |
|---|---|
| FT | 15,309 |
| Storage - CSS | 24,949 |
| End Users | 5,570 |
| Incremental | |
| DTH | 45,828 |

| Allocation per Customer Class | |
|---|---|
| Firm Sales: | 37,811 |
| Interruptible Sales & Transport | 8,017 |
| DTH | 45,828 |
| MCF | 44,134 |

Transco - Gainesville, GA
Tuesday, January 16, 2024

| Peak Day Stats | |
|---|---|
| EDD = | 47 |
| MCF= | 22,303 |
| DTH = | 23,049 |
| BTU Factor= | 1.033 |

| Supply Utilized - DTH | |
|---|---|
| FT 9136963 | 7,090 |
| FT 9136655 | |
| FT 9136657 | |
| FT 9136943 | |
| WSS 9136651 | 6,206 |
| GSS 9137183 | 1,960 |
| LNG 9136653 | |
| ESS 9136654 | 346 |
| End Users | 7,447 |
| DTH | 23,049 |
| | 0 |

| Allocation per Customer Class | |
|---|---|
| Firm Sales: | 14,913 |
| Interruptible Sales & Transport | 8,136 |
| DTH | 23,049 |
| MCF | 22,303 |

**Liberty Utilities (Peach State Natural Gas) Corp.**
**2024-2025 Design Day Summary**

| | |
|---|---|
| **Load Study:** | Columbus, GA |
| **Weather Station:** | KCSG |
| **Design Day HDD Method:** | Coldest Day Since 1984 |
| **Data Sample:** | 2/1/2022 to 3/31/2024 |

| **Design Day DTH Summary** | | | | **Notes** |
|---|---|---|---|---|
| **Regression $R^2$** | 0.0000 | | | |
| **Forecasted DTH** | 0 | **Date of Design Day:** | 1/21/1985 | Forecasted DTH includes Woodland and Manchester |
| **5% Error Margin** | 0 | **HDD** | 54.5 | |
| **3rd Party Obligations DTH** | 0 | **HDD(-1)** | 41.5 | |
| **Total Forecasted DTH** | 0 | | | |
| **Final Deliverable Capacity DTH** | 63,144 | | | |
| **Reserve Capacity DTH** | 63,144 | | | |
| **Reserve Margin Capacity (%)** | #DIV/0! | | | |

**Summary of Final Delivery Capacity**

| Pipeline | Contract # & Description | | MDQ Dth | Notes |
|---|---|---|---|---|
| SNG | 451895-FTSNG | | 12,000 | Year round daily transportation entitlement. |
| SNG | 451894-FTSNG | | 21,436 | Year round daily transportation entitlement. |
| SNG | 451893-FNSNG | | 22,009 | Year round daily transportation entitlement. |
| SNG | 469678-FTSNG | From Manchester system acquisition | 686 | 686 Dth/d zone 3 seasonal entitlement (Nov.-Apr.) used to deliver to Columbus zone 2 delivery points during winter. Entitelment: November to March 686 Dth/d, April 67 Dth/d. |
| SNG | 463734-FTSNG | From Woodland system acquisition | 39 | Daily transport entitlement ratchets: Nov-Mar: 39 dth, Apr: 18 dth, May:0 dth, June: 3 dth, July: 1 dth, Aug: 5 dth, Sept: 0 dth, Oct: 9 dth. |
| SNG | 463736-FTSNG | From Woodland system acquisition | 104 | 104 Dth/d zone 3 seasonal entitlement (Nov-Mar): 100 Dth/d used to deliver to Columbus zone 2 delivery points during winter. |
| SNG | 469663-FTSNG | From Manchester system acquisition | 150 | Year round daily transportation entitlement. |
| SNG | 469681-FNSNG | From Manchester system acquisition | 520 | Transport ratchets: Daily entitlement Nov-Apr: 520 dth/d, May: 297 dth/d, June: 255 dth/d, July: 244 dth/d Aug: 265 dth/d, Sept: 246 dth/d, Oct: 490 dth/d. |
| SNG | Delivered Peaking Service | | 6,200 | |
| | | **Total Capacity** | **63,144** | |

**Summary of Upstream and Storage Capacity**

| Pipeline | Contract # & Description | MDQ Dth | Notes |
|---|---|---|---|
| SNG | 451896-CSSNG | 29,345 | MSQ 1,453,265; MDIQ 11,179, MDWQ 29,345<br>Ratchets: 29,345 (60-100%); 25,823 (50-59%); 22,889 (25-49%); 16,433 (0-24%) |
| SNG | 463737-CSSNG | 104 | From Woodland acquisition |
| SNG | 469668-CSSSNG | 897 | From Manchester acquisition, MSQ 44,409, MDIQ 341, MDWQ=896 |
| | **Total Upstream and Storage Capacity** | **30,346** | |

**Columbus, GA Initial Test for Model Stability**

| Dependent Variable: COLUMBUS_FIRM | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 05/07/24 Time: 08:44 | | | | |
| Sample: | | | | |
| Included observations: | | | | |
| HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | | | | |
| COLUMBUS_EDD | | | | |
| COLUMBUS_EDD45 | | | | |
| COLUMBUS_EDD(-1) | | | | |
| COLUMBUS_FIRM(-1) | | | | |
| R-squared | | Mean dependent var | | |
| Adjusted R-squared | | S.D. dependent var | | |
| S.E. of regression | | Akaike info criterion | | |
| Sum squared resid | | Schwarz criterion | | |
| Log likelihood | | Hannan-Quinn criter. | | |
| F-statistic | | Durbin-Watson stat | | |
| Prob(F-statistic) | | Wald F-statistic | | |
| Prob(Wald F-statistic) | | | | |

| Quandt-Andrews unknown breakpoint test | | |
|---|---|---|
| Null Hypothesis: No breakpoints within 10% trimmed data | | |
| Equation Sample: | | |
| Test Sample: | | |
| Number of breaks compared: | | |
| Statistic | Value | Prob. |
| Note: | | |

**Final Stability Test for Columbus, GA**

| Dependent Variable: COLUMBUS_FIRM | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 05/07/24 Time: 08:44 | | | | |
| Sample: | | | | |
| Included observations: | | | | |
| HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | | | | |
| COLUMBUS_EDD | | | | |
| COLUMBUS_EDD45 | | | | |
| COLUMBUS_EDD(-1) | | | | |
| COLUMBUS_FIRM(-1) | | | | |
| R-squared | | Mean dependent var | | |
| Adjusted R-squared | | S.D. dependent var | | |
| S.E. of regression | | Akaike info criterion | | |
| Sum squared resid | | Schwarz criterion | | |
| Log likelihood | | Hannan-Quinn criter. | | |
| F-statistic | | Durbin-Watson stat | | |
| Prob(F-statistic) | | Wald F-statistic | | |
| Prob(Wald F-statistic) | | | | |

| Quandt-Andrews unknown breakpoint test | | |
|---|---|---|
| Null Hypothesis: No breakpoints within 10% trimmed data | | |
| Equation Sample: | | |
| Test Sample: | | |
| Number of breaks compared: | | |
| Statistic | Value | Prob. |
| Note: | | |

Liberty 2023 - 2024 Gas Supply Plan GPSC Docket No. 55650

Exhibit II, Page 3

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| Coldest Day on Record for:<br>Date: | Columbus, GA<br>DD Stats<br>1/21/1985 | DD(-1)<br>1/20/1985 | LRV Calcs |
|---|---|---|---|
| | | | |
| **Forecasted Volume** | | | |
| **Residential Growth Adjustment** | | | |



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**Regression Model for Design Day Calculation**

Dependent Variable: COLUMBUS_FIRM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| | | | | |

| | | | |
|---|---|---|---|
| R-squared | | Mean dependent var | |
| Adjusted R-squared | | S.D. dependent var | |
| S.E. of regression | | Akaike info criterion | |
| Sum squared resid | | Schwarz criterion | |
| Log likelihood | | Hannan-Quinn criter. | |
| Durbin-Watson stat | | | |

Exhibit II, Page 4 GPSC Docket No. 55650

**Regression Model for DTH(-1) Derivation**

Dependent Variable: COLUMBUS_FIRM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| COLUMBUS_EDD | | | | |
| COLUMBUS_EDD45 | | | | |
| COLUMBUS_EDD(-1) | | | | |
| MONTH12 | | | | |
| MONTH02 | | | | |
| MONTH01 | | | | |
| MONTH03 | | | | |
| MONTH11 | | | | |
| WEEKDAY01 | | | | |
| WEEKDAY02 | | | | |
| WEEKDAY03 | | | | |
| WEEKDAY04 | | | | |
| WEEKDAY05 | | | | |
| WEEKDAY06 | | | | |
| WEEKDAY07 | | | | |

| | | | |
|---|---|---|---|
| R-squared | | Mean dependent var | |
| Adjusted R-squared | | S.D. dependent var | |
| S.E. of regression | | Akaike info criterion | |
| Sum squared resid | | Schwarz criterion | |
| Log likelihood | | Hannan-Quinn criter. | |
| Durbin-Watson stat | | | |

**Liberty Utilities (Peach State Natural Gas) Corp.**
**2024-2025 Design Day Summary**

| | |
|---|---|
| **Load Study:** | Gainesville, GA |
| **Weather Station:** | KGVL |
| **Design Day HDD Method:** | Coldest Day Since 1984 |
| **Data Sample:** | 1/1/2022 to 3/31/2024 |

**Design Day DTH Summary**

| | | | |
|---|---|---|---|
| **Regression $R^2$** | 0.0000 | | |
| **Forecasted DTH** | 0 | **Date of Design Day:** | 1/21/1985 |
| **5% Error Margin** | 0 | **HDD** | 56 |
| **3rd Party Obligations** | 0 | **HDD(-1)** | 46 |
| **Total Forecasted DTH** | 0 | **Notes:** | |
| **Final Deliverable Capacity DTH** | 21,014 | | |
| **Reserve Capacity DTH** | 21,014 | | |
| **Reserve Margin Capacity (%)** | #DIV/0! | | |

**Summary of Final Delivery Capacity**

| Pipeline | Contract # & Description | MDQ Dth | Notes |
|---|---|---|---|
| Transco | FT Momentum 9136655 | 2,000 | |
| Transco | FT 9136657 | 3,933 | |
| Transco | FT 9136963 | 8,384 | |
| Transco | FT 9136943 | 207 | |
| Transco | GSS 9137183 | 2,640 | Storage has own transport; MSQ 126,006; MDIQ 700; MDWQ 2,640 |
| | | | GSS Ratchets: 2,640 (35-100%); 2,614 (20-34%); 1,954 (7-19%); 1,452 (0-6%) |
| | | | Minimum GSS storage physical inventory thru Feb is 35% for RFP |
| Transco | Delivered Peaking Service | 1,500 | December to February only |
| | additional peaking service needed winter 24-25 | 2,350 | |
| | **Total Capacity** | **21,014** | |

**Summary of Upstream and Storage Capacity**

| Pipeline | Contract # & Description | MDQ Dth | Notes |
|---|---|---|---|
| Transco | ESS 9136654 | 2,640 | MSQ 22,273; MDIQ 220; MDWQ 2,640; No ratchets |
| Transco | WSS 9136651 | 4,201 | MSQ 399,069; MDIQ 2,217 MDWQ 4,201 |
| | | | WSS Ratchets: 4,201 (81-100%); 3,765 (61-80%); 3,411 (41-60%); 2,850 (21-40%); 2,307 (0-20%) |
| | **Total Upstream and Storage Capacity** | **6,841** | |

## Gainesville, GA Initial Test for Model Stability

| Dependent Variable: GAINESVILLE_FIRM<br>Method: Least Squares | | | | |
|---|---|---|---|---|
| Date: 05/01/24 Time: 09:46 | | | | |
| Sample:<br>Included observations:<br>HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C<br>GAINESVILLE_EDD<br>GAINESVILLE_EDD55<br>GAINESVILLE_EDD(-1)<br>GAINESVILLE_FIRM(-1) | | | | |
| R-squared<br>Adjusted R-squared<br>S.E. of regression<br>Sum squared resid<br>Log likelihood<br>F-statistic<br>Prob(F-statistic)<br>Prob(Wald F-statistic) | | Mean dependent var<br>S.D. dependent var<br>Akaike info criterion<br>Schwarz criterion<br>Hannan-Quinn criter.<br>Durbin-Watson stat<br>Wald F-statistic | | |

| Quandt-Andrews unknown breakpoint test<br>Null Hypothesis: No breakpoints within 10% trimmed data |
|---|
| Equation Sample:<br>Test Sample:<br>Number of breaks compared: |
| Note: |

## Final Stability Test for Gainesville, GA

| Dependent Variable: GAINESVILLE_FIRM<br>Method: Least Squares | | | | |
|---|---|---|---|---|
| Date: 05/08/24 Time: 14:15 | | | | |
| Sample:<br>Included observations:<br>HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C<br>GAINESVILLE_EDD<br>GAINESVILLE_EDD55<br>GAINESVILLE_EDD(-1)<br>GAINESVILLE_FIRM(-1) | | | | |
| R-squared<br>Adjusted R-squared<br>S.E. of regression<br>Sum squared resid<br>Log likelihood<br>F-statistic<br>Prob(F-statistic)<br>Prob(Wald F-statistic) | | Mean dependent var<br>S.D. dependent var<br>Akaike info criterion<br>Schwarz criterion<br>Hannan-Quinn criter.<br>Durbin-Watson stat<br>Wald F-statistic | | |

| Quandt-Andrews unknown breakpoint test<br>Null Hypothesis: No breakpoints within 10% trimmed data |
|---|
| Equation Sample:<br>Test Sample:<br>Number of breaks compared: |
| Note: |



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| Coldest Day on Record for:<br>Date: | Gainesville<br>DD Stats<br>1/21/1985 | DD(-1)<br>1/20/1985 | LRV Calcs |
|---|---|---|---|
| | | | |
| Forecasted Volume | | | |
| Residential Growth Adjustment | | | |
| Commercial Growth Adjustment | | | |



**This is a Public Disclosure Version of a Trade Secret Document**

**Regression Model for Design Day Calculation**

Dependent Variable: GAINESVILLE_FIRM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| | | | | |

| | | | |
|---|---|---|---|
| R-squared | | Mean dependent var | |
| Adjusted R-squared | | S.D. dependent var | |
| S.E. of regression | | Akaike info criterion | |
| Sum squared resid | | Schwarz criterion | |
| Log likelihood | | Hannan-Quinn criter. | |
| Durbin-Watson stat | | | |

**Regression Model for DTH(-1) Derivation**

Dependent Variable: GAINESVILLE_FIRM

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| | | | | |

| | | | |
|---|---|---|---|
| R-squared | | Mean dependent var | |
| Adjusted R-squared | | S.D. dependent var | |
| S.E. of regression | | Akaike info criterion | |
| Sum squared resid | | Schwarz criterion | |
| Log likelihood | | Hannan-Quinn criter. | |
| Durbin-Watson stat | | | |