MARK D. CAUDILL, LLC
ATTORNEY AT LAW

Public Disclosure Version of a TRADE SECRET Document

June 1, 2023

Ms. Sallie Tanner
Executive Secretary
Georgia Public Service Commission
244 Washington Street, S.W.
Atlanta, GA 30334-9052

RE: Docket No. 45083
Liberty Utilities (Peach State Natural Gas) Corp. 2023 - 2024 Gas Supply Plan

Public Disclosure Filing of Design Day and Final Delivery Capacity Summaries for the service areas in and around both Columbus and Gainesville

and

Trade Secret Filing of Liberty Utilities' Design Day and Final Delivery Capacity Summaries

Dear Ms. Tanner:

Attached is the Public Disclosure version of Liberty Utilities (Peach State Natural Gas) Corp.'s Design Day and Final Delivery Capacity Summaries for the service areas in and around Gainesville as well as for the service areas in and around Columbus in the above-referenced docket. Also enclosed is a Trade Secret Filing, by which Liberty Utilities is providing to Staff Trade Secret versions of the Design Day and Final Delivery Capacity Summaries as well as electronic copies of the Excel-based models and the data used to calculate the Design Day and Final Delivery Capacity Summaries.

Please call if you have any questions. Thank you.

Sincerely,
MARK D. CAUDILL, LLC
Attorney for Liberty Utilities
(Peach State Natural Gas) Corp.



Mark D. Caudill

3290 COMMONS GATE BEND
BERKELEY LAKE, GA 30092-4946
VOICE: 404-394-4663 FAX: 404-585-3156
Mark@MDCaudill.com

STATE OF GEORGIA
BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE:	)	
LIBERTY UTILITIES (PEACH STATE NATURAL GAS) CORP.	)	DOCKET NO. 45083
GAS SUPPLY PLAN 2023 – 2024	)	

TRADE SECRET FILING OF
LIBERTY UTILITIES (PEACH STATE NATURAL GAS) CORP.

Liberty Utilities (Peach State Natural Gas) Corp. ("Liberty Utilities" or the "Company") hereby files with the Georgia Public Service Commission ("Commission") this filing regarding Liberty Utilities' Excel-based models and the supporting information (collectively, the "Models") that Calculate Design Day and Final Delivery Capacity Summaries for the Company's service areas in and around Columbus and Gainesville in the above-referenced docket. The Models and supporting information contain data, materials, information, and processes that are of a proprietary and trade secret nature. Liberty Utilities is therefore filing the proprietary and trade secret Models and related information pursuant to Commission Rule 515-3-1-.11 governing trade secrets.

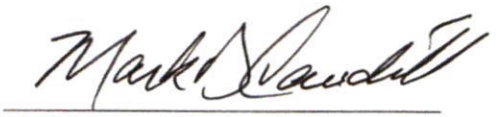
The output summaries of the Models are referred to as "Design Day and Final Delivery Capacity Summaries." Simultaneously with this Trade Secret filing, the Company filed copies of the Design Day and Final Delivery Capacity Summaries for the service areas in and around both Gainesville and Columbus produced by the Models as public disclosure documents in this docket. Although the output summaries are being publicly disclosed, the Models themselves as well as the related information contain data, materials, information, and processes that the Company deems to be proprietary, confidential, and trade secret. The Company is providing the trade secret Models and related information as part of its 2023 - 2024 Gas Supply Plan. The Models, as well as the data, materials, information, and processes reflected therein, derive economic value to the Company and to the Company's customers from not being generally known to others. Additionally,

the data and information are exempt from public disclosure under O.C.G.A. § 50-18-72(a)(34). Liberty Utilities submits the Models, as well as the data, materials, information, and processes reflected and contained therein, are highly confidential and competitively sensitive. Accordingly, consistent with the Company's own interests, and the interests of its customers, the Company protects against disclosure of Models, as well as the data, materials, information, and processes contained and reflected therein.

Pursuant to the terms of Commission Rule 515-3-1-.11 and the Commission's alternative electronic filing procedures, Liberty Utilities is providing the Models and related information regarding the Design Day and Final Delivery Capacity Summaries under protective seal (each page is marked "Trade Secret") to the Commission Staff. The trade secret documents have been numbered and the Company is maintaining a master list of these documents. Additionally, the affidavit of Bouxsein is attached hereto.

Respectfully submitted this 1st day of June 2023.

MARK D. CAUDILL, LLC, Attorney for
Liberty Utilities (Peach State Natural Gas) Corp.



Mark D. Caudill

3290 Commons Gate Bend
Berkeley Lake, GA 30092-4946
Voice: 404-394-4663
Fax: 404-585-3156
Mark@MDCaudill.com

STATE OF GEORGIA

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE:	)	
LIBERTY UTILITIES (PEACH STATE NATURAL GAS) CORP.	)	DOCKET NO. 45083
GAS SUPPLY PLAN 2023 – 2024	)	

AFFIDAVIT FOR TRADE SECRET FILING

STATE OF GEORGIA)
COUNTY OF HALL)

Adam Bigknife, first being duly sworn, deposes and says that he is familiar with the contents of the accompanying Trade Secret records, reports, and Trade Secret Filing, and that to the best of his knowledge and belief, the information in the records and reports constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 as set forth in the accompanying Trade Secret Filing.

Adam Bigknife
Senior Manager, Rates and Regulatory Affairs
Liberty Utilities (Peach State Natural Gas) Corp.

SUBSCRIBED AND SWORN TO before me, the undersigned authority, this 30th day of May 2023.

My Commission Expires: 12-20-26

Notary Public

MELISSA JEAN HARBISON NOTARY PUBLIC Exp. December 20, 2026 HALL COUNTY, GA

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE:	)	
LIBERTY UTILITIES (PEACH STATE NATURAL GAS) CORP.	)	DOCKET NO. 45083
GAS SUPPLY PLAN 2023 – 2024	)	

CERTIFICATE OF SERVICE

I, Mark D. Caudill, on behalf of Liberty Utilities (Peach State Natural Gas) Corp, hereby certify this date furnished a copy of the Company's public disclosure documents regarding the 2022-2023 Gas Supply Plan Forecasts (Pages 1 – 10) in the above-referenced docket, as well as a copy of the Trade Secret Filing relating thereto, by email, by depositing a copy of same in United States mail with adequate postage affixed thereto, or by a prepaid overnight delivery service addressed to the following:

Sallie Tanner *
Executive Secretary
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, Georgia 30334-5701
stanner@psc.ga.gov

Nancy Tyer *
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, Georgia 30334-5701
NANCYT@psc.ga.gov

Samuel Johnson *
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, Georgia 30334-5701
sjohnson@psc.ga.gov

Ginny Davis, Attorney *
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, Georgia 30334-5701
gdavis@psc.ga.gov

Adam Bigknife, Senior Manager *
Rates and Regulatory Affairs
Liberty Utilities (Peach State Natural Gas) Corp.
17766 Cleveland Highway
Gainesville, GA 30501
Adam.Bigknife@libertyutilities.com

Tatiana Earhart, Manager *
Gas Supply, Operations
Liberty Utilities
602 S Joplin Avenue
Joplin, Missouri 64818
Tatiana.Earhart@libertyutilities.com

This 1st day of June, 2022.

MARK D. CAUDILL, LLC, Attorney for
Liberty Utilities (Peach State Natural Gas) Corp.

By: _____
Mark D. Caudill

3290 Commons Gate Bend
Berkeley Lake, GA 30092-4946
Voice: 404-394-4663
Fax: 404-585-3156
Mark@MDCaudill.com

* By Hand Delivery
** By Email
*** By US Mail
****By Overnight Delivery Service

2022- 2023 Georgia Peak Day

Southern - Columbus, GA
Friday, December 23, 2022

Peak Day Stats	
HDD =	44
MCF =	46,502
DTH =	48,012
BTU Factor =	1.032

Supply Utilized - DTH	
FT	18,797
Storage - CSS	24,825
End Users	4,390
Incremental	0
DTH	48,012

Allocation per Customer Class	
Firm Sales:	42,523
Interruptible Sales & Transport	5,489
DTH	48,012
MCF	46,502

Transco - Gainesville, GA
Friday, December 23, 2022

Peak Day Stats	
HDD =	54
MCF=	20,720
DTH =	21,386
BTU Factor=	1.029

Supply Utilized - DTH	
FT 9136963	9,332
FT 9136655	0
FT 9136657	0
FT 9136943	0
WSS 9136651	4,846
GSS 9137183	1,530
LNG 9136653	0
ESS 9136654	271
End Users	5,407
DTH	21,386
	0

Allocation per Customer Class	
Firm Sales:	16,959
Interruptible Sales & Transport	4,427
DTH	21,386
MCF	20,788

Liberty Utilities (Peach State Natural Gas) Corp.
2023-2024 Design Day Summary

Load Study:	Columbus, GA
Weather Station:	KCSG
Design Day HDD Method:	Coldest Day Since 1984
Data Sample:	12/1/2020 to 3/31/2023

Design Day DTH Summary			
Regression R^2	0.0000		
Forecasted DTH	0	**Date of Design Day:**	1/21/1985
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!		

Notes
Forecasted DTH includes Woodland and Manchester

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 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	451939-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:
Date: 05/11/23 Time: 15:44 Sample: Included observations: HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth =

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C				
COLUMBUS_HDD				
COLUMBUS_HDD45				
COLUMBUS_HDD(-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:
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: 05/11/23 Time: 15:47 Sample: Included observations: HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C				
COLUMBUS_HDD				
COLUMBUS_HDD45				
COLUMBUS_HDD(-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:

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Coldest Day on Record for: Date:	Columbus, GA DD Stats 1/21/1985	DD(-1) 1/20/1985	LRV Calcs
Forecasted Volume			

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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			

Regression Model for DTH(-1) Derivation

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			

Liberty Utilities (Peach State Natural Gas) Corp.
2023-2024 Design Day Summary

Load Study:	Gainesville, GA
Weather Station:	KGVL
Design Day HDD Method:	Coldest Day Since 1984
Data Sample:	1/1/2021 to 3/31/2023

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	20,364		
Reserve Capacity DTH	20,364		
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	3,200	December to February only
	Total Capacity	**20,364**	

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
Method: Least Squares

Date: 05/11/23 Time: 15:50

Sample: 11/02/2020 3/31/2021 11/01/2021 3/31/2022 11/01/2022 3/31/2023
Included observations: 452
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 6.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1454.882956	103.4647297	14.06163202	0.000000
GAINESVILLE_HDD	140.7565313	13.14445079	10.70843762	0.000000
GAINESVILLE_HDD55	62.18849553	17.4034493	3.573343103	0.000391
GAINESVILLE_HDD(-1)	-47.10660614	9.371502696	-5.026579799	0.000001
GAINESVILLE_FIRM(-1)	0.503564305	0.026175892	19.23771365	0.000000

R-squared	0.91	Mean dependent var	6682.84
Adjusted R-squared	0.91	S.D. dependent var	2562.45
S.E. of regression	784.69	Akaike info criterion	16.18
Sum squared resid	275231608.90	Schwarz criterion	16.22
Log likelihood	-3651.55	Hannan-Quinn criter.	16.20
F-statistic	1090.61	Durbin-Watson stat	1.68
Prob(F-statistic)	0.00	Wald F-statistic	1518.87
Prob(Wald F-statistic)	0.00		

Quandt-Andrews unknown breakpoint test
Null Hypothesis: No breakpoints within 10% trimmed data

Equation Sample: 11/02/2020 3/31/2021 11/1/2021 3/31/2022 11/1/2022 3/31/2023
Test Sample: 12/18/2020 2/14/2023
Number of breaks compared: 361

Statistic	Value	Prob.
Maximum LR F-statistic (3/20/2020)	3.77	0.05
Exp LR F-statistic	0.88	0.20
Ave LR F-statistic	1.56	0.09

Note: probabilities calculated using Hansen's (1997) method
WARNING: estimation sample is non-continuous (probabilities calculated assuming a continuous sample)

Final Stability Test for Gainesville, GA

Dependent Variable: GAINESVILLE_FIRM
Method: Least Squares

Date: 05/11/23 Time: 15:54

Sample:
Included observations:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C				
GAINESVILLE_HDD				
GAINESVILLE_HDD55				
GAINESVILLE_HDD(-1)				
GAINESVILLE_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:

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TRADE SECRET

Coldest Day on Record for: Date:	Gainesville DD Stats 1/21/1985	DD(-1) 1/20/1985	LRV Calcs
Forecasted Volume			

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Regression Model for Design Day Calculation				
Dependent Variable: GAINESVILLE_FIRM				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
R-squared		Mean dependent var		

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		