Attachment A

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE:	)	
	)	
LIBERTY UTILITIES (PEACH STATE NATURAL GAS) CORP. 2022 - 2023 GAS SUPPLY PLAN	)	**DOCKET NO. 44392**

ADDENDUM TO STIPULATION

WHEREAS, the Georgia Public Service Commission Natural Gas Staff (a "Party" to this Addendum to Stipulation and hereinafter referred to within this Addendum to Stipulation as "Staff"), and Liberty Utilities (Peach State Natural Gas) Corp. (a "Party" to this Addendum to Stipulation and hereinafter referred to within this Addendum to Stipulation as either "Liberty Utilities" or the "Company") entered into a Stipulation in this Docket on August 26, 2022 (referred to herein as the "Initial Stipulation"), in which the Parties requested that the Commission approve specific aspects of the Company's 2022 – 2023 Gas Supply Plan; and

WHEREAS, after a hearing on the Initial Stipulation, on September 1, 2022, the Commission held a Special Administrative Session and approved the Initial Stipulation; and

WHEREAS, the Parties acknowledged in the Initial Stipulation that a revised 2022 – 2023 design day forecast for Liberty Utilities' service territories would be required; and

WHEREAS, in compliance with the mutual commitments made in the Initial Stipulation in this docket, Liberty Utilities prepared and presented to Staff revised design day forecasts for its service territories in and around Gainesville and its service territories in and around Columbus; and

WHEREAS, representatives of the Company and Staff convened in person in Gainesville on October 3 – 5, 2022, to review, examine, test, and verify the revisions to the initial design day forecasts for the 2022 – 2023 Gas Supply Plan, and met by video conference on October 6, 2022. Staff and the Company continued to work together on the revised forecast until the time of this Addendum to Stipulation was completed; and

WHEREAS, the results of the revised design day forecasts are attached as Exhibit II (Revised), to replace pages 1 – 7 of the Exhibit II filed on June 1, 2022;

NOW THEREFORE, the Parties agree to the following Addendum to Stipulation as a final resolution to the Company's 2022 – 2023 Gas Supply Plan.

1. Affirmation of Initial Stipulation

The Initial Stipulation approved by the Commission on September 1, 2022, remains fully in effect as if fully set forth herein, except as specifically modified by this Addendum to Stipulation (if approved by the Commission). All previous Commission Orders and existing tariff provisions not specifically addressed by an Order of the Commission approving this Addendum to Stipulation remain in effect.

2. Additional Provisions Addressed by the Addendum to the Stipulation

Staff and Liberty Utilities agree to the following paragraphs 11 and 12, in addition to the paragraphs set forth in the Initial Stipulation:

11. **Design Day Forecasts.** For the 2022 – 2023 Plan Year, the Liberty Design Day Forecasts set forth in Exhibit H (Revised) are approved as filed on Tuesday, October 25, 2022.

12. **Peaking Services**

a. **Peaking Services for Gainesville and Surrounding Areas**
Liberty Utilities is authorized to contract for new citygate bundled peaking services for no less than five days during the 2022 – 2023 winter heating season, for a maximum daily quantity ("MDQ") of 3,600 Dth/Day to include an approximate 5% reserve margin above the forecasted firm design day requirement for its service territories in and around Gainesville. Consistent with prior peaking service authorizations, Liberty is authorized to use a "best cost" acquisition strategy, if Liberty can obtain a higher level of service and/or a longer duration of service at a cost no greater than the optimal peaking services.

b. **Peaking Services for Columbus and Surrounding Areas**
Liberty Utilities is authorized to contract for new citygate bundled peaking services for no less than five days during the 2022 – 2023 winter heating season, for a maximum daily quantity ("MDQ") of 6,800 Dth/Day to provide approximately a 5% margin above the forecasted firm design day requirement for its service territories in and around Columbus Consistent with prior peaking service authorizations, Liberty is authorized to use a "best cost" acquisition strategy, if Liberty can obtain a higher level of service and/or a longer duration of service at a cost no greater than the optimal peaking services.

13. **Request for Commission Approval.**

The Parties request that the Commission approve the Addendum to Stipulation for the 2022 – 2023 Gas Supply Plan as modified by the Initial Stipulation. If this Addendum to Stipulation is not accepted by the Commission in accordance with the provisions hereof, this Addendum to Stipulation shall be void and of no further effect and shall not prejudice any position taken by either Party and shall not be admissible evidence in this or in any other proceeding.

Agreed to this 24th day of October 2022.

Title: *Director, Natural Gas Unit*
On behalf of
Georgia Public Service Commission Staff

Title: *President*
On behalf of
Liberty Utilities (Peach State Natural Gas) Corp.

2021- 2022 Georgia Peak Day

Southern - Columbus, GA
Saturday, January 29, 2022

Peak Day Stats	
HDD =	32
MCF =	37,230
DTH =	38,520
BTU Factor =	1.035

Supply Utilized - DTH	
FT	12,800
Storage - CSS	20,290
Atmos LNG	0
End Users	5,430
Incremental	0
DTH	38,520

Allocation per Customer Class		
Firm Sales		32,451
Interruptible Sales & Transport		6,069
	DTH	38,520
	MCF	37,230

Transco - Gainesville, GA
Monday, January 17, 2022

Peak Day Stats	
HDD =	33
MCF =	18,450
DTH =	18,981
BTU Factor =	1.029

Supply Utilized - DTH	
FT 9136963	7,400
FT 9136655	0
FT 9136657	0
FT 9136943	0
WSS 9136651	4,510
GSS 9137183	1,424
LNG 9136653	0
ESS 9136654	252
End Users	5,395
DTH	18,981
	0

Allocation per Customer Class		
Firm Sales		13,094
Interruptible Sales & Transport		5,887
	DTH	18,981
	MCF	18,450

Liberty Utilities (Peach State Natural Gas) Corp.
2022-2023 Design Day Summary

Load Study:	Columbus, GA
Weather Station:	KCSG
Design Day HDD Method:	Coldest Day Since 1984
Data Sample:	12/1/2019 to 3/31/2022

Design Day DTH Summary				**Notes**
Regression R^2	0.9812			
Forecasted DTH	60,618	**Date of Design Day:**	1/21/1985	Forecasted DTH includes Woodland and Manchester
5% Error Margin	3,031	**HDD**	54.5	
3rd Party Obligations DTH	0	**HDD(-1)**	41.5	
Total Forecasted DTH	63,648			
Final Deliverable Capacity DTH	63,744			
Reserve Capacity DTH	96			
Reserve Margin Capacity (%)	0.15%			

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		6,800	
		Total Capacity	**63,744**	

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%); 18,433 (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

Stability Test for Columbus, GA

Dependent Variable: COLUMBUS_FIRM Method: Least Squares				
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.		
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		
Statistic	Value	Prob.

Dependent Variable: COLUMBUS_FIRM Method: Least Squares				
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.		
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		
Statistic	Value	Prob.

Data and Graphs Redacted

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Coldest Day on Record for: Date:	Columbus, GA DD Stats 1/21/1985	DD(-1) 1/20/1985	LRV Calcs
Month			
Day of Week			
HDD			
HDD minus 30			
HDD(-1)			
DTH(-1)			
Monthly Load			
Daily Load			
Weather Load			
DTH Lag Load			
Forecasted Volume			

TRADE SECRET

Data Redacted

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			

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Liberty Utilities (Peach State Natural Gas) Corp.
2022-2023 Design Day Summary

Load Study:	Gainesville, GA
Weather Station:	KGVL
Design Day HDD Method:	Coldest Day Since 1984
Data Sample:	12/15/2013 to 3/31/2022

Design Day DTH Summary			
Regression R^2	0.9848		
Forecasted DTH	19,789	**Date of Design Day:**	1/21/1985
5% Error Margin	989	**HDD**	56
3rd Party Obligations	0	**HDD(-1)**	46
Total Forecasted DTH	20,778	**Notes:**	
Final Deliverable Capacity DTH	20,764		
Reserve Capacity DTH	(14)		
Reserve Margin Capacity (%)	-0.07%		

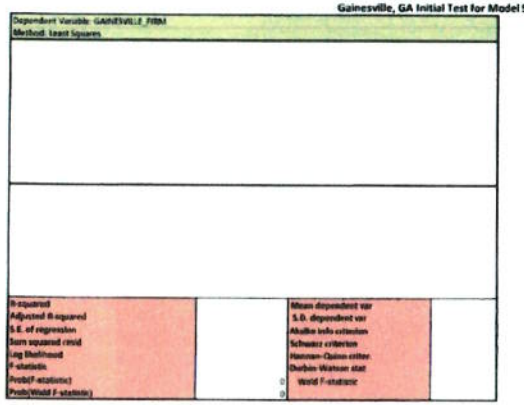
Summary of Final Delivery Capacity

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	3,600	December to February only
	Total Capacity	**20,764**	

Summary of Upstream and Storage Capacity

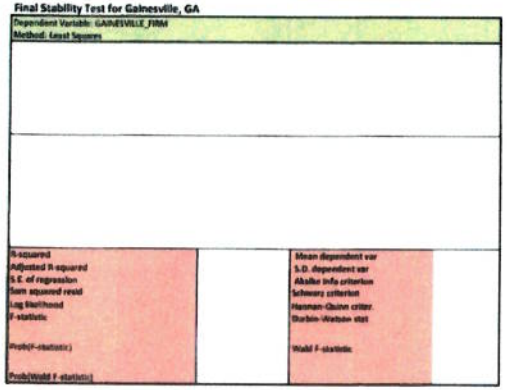
Pipeline	Contract # & Description	MDQ Dth	Notes
Transco	ESS 9136654	2,640	MSQ 22,273, MDIQ 220, MDWQ 2,640, No ratchets
Transco	WSS 9136651	4,201	MSQ 399,069, MDIQ 2,217 MDWQ 4,201 WSS Ratchets: 4,201 (81-100%), 3,765 (61-80%), 3,411 (41-60%), 2,850 (21-40%), 2,307 (0-20%)
	Total Upstream and Storage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

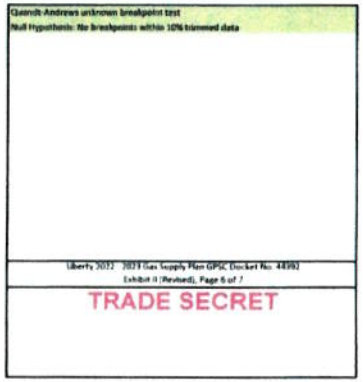
Gainesville, GA Initial Test for Model Stability





Final Stability Test for Gainesville, GA





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Data and Graphs Redacted

Coldest Day on Record for: Date:	Gainesville DD Stats 1/21/1985	DD(-1) 1/20/1985	LRV Calcs
Month			
Day of Week			
HDD			
HDD55			
HDD(-1)			
DTH(-1)			
Monthly Load			
Daily Load			
Weather Load			
DTH Lag Load			
Post Model Adjustment			

Liberty 2022 - 2023 Gas Supply Plan GPSC Docket No. 44392
Exhibit II (Revised), Page 7 of 7

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Data Redacted

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		

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