

VIGGO C. FISH
Direct Dial: 603.226.4412
Email: viggo.fish@mclane.com
Admitted in NH
11 South Main Street, Suite 500
Concord, NH 03301
T 603.226.0400
F 603.230.4448

September 14, 2023

Michael J. Sheehan Director, Legal Services Liberty Utilities Corp. 15 Buttrick Road Londonderry, NH 03053

Re:

Docket No. DE 23-039

Liberty Utilities Corp. d/b/a Liberty

Change in Distribution Rates

Dartmouth College Data Requests—Set 2

Dear Attorney Sheehan:

Pursuant to the New Hampshire Public Utilities Commission's ("PUC" or "Commission") Prehearing Order of June 30, 2023, and Procedural Order of July 24, 2023, Trustees of Dartmouth College serve the enclosed Set 2 Data Requests. Please provide responses in the same manner and consistent with the same set of instructions as set forth in the Department of Energy's Data Requests.

If you have any questions, please do not hesitate to contact me.

Very truly yours

Viggo C. Fish

VCF:nld

STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 23-039 LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP. D/B/A LIBERTY REQUEST FOR CHANGE IN DISTRIBUTION RATES

DARTMOUTH COLLEGE DATA REQUESTS—SET 2

DAR 2-1. Referring to Mr. Therrien's Attachment GHT-3, Line 24 indicates that Liberty billed 356,997,893 kWh in total distribution consumption to G-1 customers during the test year and Line 24 indicates that Liberty billed 880,809 kW in total billing demand to G-1 customers during the test year.

a. Using the following table format, please provide a monthly breakdown of the kilowatt-hour distribution consumption assessed to G-1 customers during the test year, including total distribution consumption billed to G-1 customers in each month, total on-peak distribution consumption billed to G-1 customers in each month, and total off-peak distribution consumption billed to G-1 customers in each month:

Test Year	Total G-1 Billed	Total G-1 Billed	Total G-1 Billed
Month	Distribution	On-Peak Distribution	Off-Peak Distribution
	Consumption (kWh)	Consumption (kWh)	Consumption (kWh)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

b. Using the following table format, please provide a monthly breakdown of the total kilowatt billing demand units assessed to G-1 customers during the test year, including billing demand billed to G-1 customers in each month and high-voltage delivery units billed to G-1 customers in each month:

Test Year	Total G-1 Billed	Total G-1 Billed High-
Month	Billing Demand (kW)	Voltage Delivery (kW)
January		
February		
March		

April	
May	
June	
July	
August	
September	
October	
November	
December	

- c. If Liberty's G-1 tariff did not include a billing demand ratchet, what would Liberty's total kilowatt billing demand assessed to G-1 customers have been during the test year? [By demand ratchet, we mean that a customer's billed demand for each month under ordinary load conditions shall be the greatest of the following: 1) the greatest fifteen-minute peak during the peak hours which occurs during such month as measured in kilowatts; 2) 90% of the greatest fifteen-minute peak during the peak hours occurring during such month as measured in kilovolt-amperes; or 3) 80% of the customer's greatest demand as so determined above during the preceding eleven months.]
- d. Using the table format below, please provide a monthly breakdown of the total kilowatthour distribution consumption that Liberty registered across all G-1 customers in the following three time periods during the test year: 1) 3 P.M. 8 P.M. on all non-holiday weekdays; 2) 8 A.M. 3 P.M. on all non-holiday weekdays; and 3) all other hours.

Test Year	Total G-1	Total G-1 Distribution	Total G-1 Distribution
Month	Distribution	Consumption (kWh):	Consumption (kWh):
	Consumption (kWh):	8 A.M. to 3 P.M. all	All other hours
	3 P.M. to 8 P.M. all	non-holiday weekdays	
	non-holiday		
	weekdays		
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

e. Examining each G-1 customer's maximum non-coincident 15-mintue grid demand registered by Liberty between 3 P.M. and 8 P.M. on non-holiday weekdays in each month

of the test year, what is the total of these 15-minute non-coincident demands for all G-1 customers during this period in each month of the test year?

Test Year	Total G-1 Customer
Month	Maximum Demand
Wionth	
	(kW):
	3 P.M. to 8 P.M. all
	non-holiday weekdays
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

DAR 2-2. Referring to Mr. Tillman's Direct Testimony, on page 5, lines 7-8, please provide an up-to-date copy of Liberty's Advanced Rate Design Roadmap.

DAR 2-3. Mr. Tillman's Direct Testimony, on page 20, lines 18-19, states the costs of the distribution function are primarily fixed in nature and do not vary based on the time of day in which the distribution service is used. When Liberty's planning engineers model a distribution substation's available capacity during local peak load conditions to determine if marginal capital investment is needed to upgrade the substation's service capacity, does Liberty include each connected customer's individual maximum demand in the distribution system model to determine load at the substation or does Liberty focus on measured load at the substation when the distribution substation experiences its peak load? If neither, please explain what information it relies upon for this purpose.

DAR 2-4. Mr. Tillman's Direct Testimony, on page 20, lines 18-19, states the costs of the distribution function are primarily fixed in nature and do not vary based on the time of day in which the distribution service is used. When Liberty's planning engineers model a primary distribution circuit's available capacity during local peak load conditions to determine if marginal capital investment is needed to upgrade the circuit's primary service capacity, does Liberty include each connected customer's individual maximum demand in the distribution system model to determine load at the substation or does Liberty focus on measured load at the substation when the distribution substation experiences its peak load? If neither, please explain what information it relies upon for this purpose.

DAR 2-5. Mr. Tillman's Direct Testimony, on page 33, lines 10-20, states that Liberty proposes to establish a single consistent methodology with similar models to calculate the TOU period rates for the generation, transmission, and distribution components of the following TOU rates: Rate D-11 (Battery Storage Pilot), Rate D-12 (Residential EV Charging), Rate EV-M (High Draw EV Charging Medium), Rate EV-L (High Draw EV Charging Large), Proposed D-TOU (Residential Whole-Home TOU), Proposed G-3-TOU (Small Commercial TOU), Proposed Rate EV-M-E (High Draw EV Charging Energy Only), Proposed Rate EV-L-E, (High Draw EV Charging Energy Only).

- a. What is the estimated cost and labor requirement (i.e., number of hours) required to implement Liberty's proposed single consistent methodology to calculate the TOU period rates and to enable automatic billing of this TOU rates?
- b. What is the estimated additional cost and labor requirement (i.e., number of hours) required to implement TOU rate updates for Rate G-1 and Rate G-2 customers to align the TOU periods and rate seasons with those of the rate classes listed above?