BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF ENBRIDGE GAS UTAH TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	Docket No. 25-057-06

DIRECT TESTIMONY OF DAVID C. LANDWARD

FOR ENBRIDGE GAS UTAH

May 1, 2025

EGU Exhibit 6.0

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is David C. Landward. My business address is 333 South State Street, Salt Lake City, Utah 84111.

Q. By whom are you employed, and what is your position?

A. I am employed by Enbridge Gas Utah as a Regulatory Consultant. My primary responsibilities include forecasting demand, customer growth, and revenue. I also perform miscellaneous analytical tasks in support of the Company's regulatory affairs, gas supply, and finance functions. I am testifying on behalf of Questar Gas Company dba Enbridge Gas Utah ("Enbridge Gas," "EGU," or the "Company").

Q. Attached to your written testimony are EGU Exhibits 6.01 through 6.03. Were these prepared by you or under your direction?

A. Yes.

Q. What are your qualifications to testify in this proceeding?

A. My qualifications are presented in EGU Exhibit 6.01.

Q. What is the purpose of your testimony in this Docket?

A. I address the Company's proposed update to the period used to establish normal heating degree days for weather normalization of usage by the General Service ("GS") rate class.

II. HEATING DEGREE DAYS

Q. Please define heating degree days?

A. Heating degree days ("HDD") is a metric commonly used to analyze gas consumption with respect to ambient temperature. HDD for a single day is derived by subtracting the average daily temperature measured in degrees Fahrenheit from a reference point or base

of 65°. For instance, if the high temperature for the day is 35°F and the low is 15°F, then the average for the day is 25°F. Subtracting 25° from a base of 65° yields 40 HDD.

Q. What are normal heating degree days?

A. Normal heating degree days ("NHDD") are average HDD values across a fixed period. The Company currently establishes NHDD across the 20-year period ending December 31, 2018. The calculation is simple: An average of HDD for each day of the year is calculated across the 20-year period. More specifically, the HDD values of all 20 occurrences of January 1 within the 20-year period are averaged; the same is done for all occurrences of January 2, January 3, and so on through December 31. Each daily average serves as the NHDD value for that day of the year, and the set of all 365 daily averages (or 366 for a leap year) comprises NHDD for the full calendar year.

Q. What are NHDD used for?

A. The Company uses NHDD to weather normalize usage by its General Service ("GS") rate class customers. Weather normalization is addressed in Section III of this testimony.

Q. When did the Company last update NHDD?

A. The Company's last update to NHDD was a component of the general rate case filing in Docket No. 19-057-02. In its final order in that docket, the Commission approved the Company's proposal to set NHDD on the 20-year period ending December 31, 2018.

Q. Is the Company proposing to reset NHDD in this case?

A. Yes. The Company is proposing to reset NHDD on the 10-year period ending December 31, 2024. I discuss the reasons for this proposal in my testimony below.

Q. When would the Company begin using the updated NHDD?

A. The Company would begin to apply the updated NHDD on January 1, 2026, the same date that rates approved by the Commission in this docket become effective.

Q. How do the proposed NHDD values compare to those currently in effect?

A. The table below summarizes the current and proposed NHDD by month. As shown, the annual NHDD sum is 9% lower than that currently set by the Company. Note that the percentage changes to warmer months are large only because of the relatively small HDD totals being adjusted.

	PROPOSED	CURRENT	%CHANGE
JAN	1,011	1,095	-9%
FEB	802	840	-6%
MAR	618	644	-5%
APR	398	444	-12%
MAY	180	218	-23%
JUN	25	49	-62%
JUL	1	2	0%
AUG	3	6	-52%
SEP	62	81	-27%
OCT	333	368	-12%
NOV	695	731	-6%
DEC	1,003	1,072	-7%
ANNUAL	**5,132**	**5,549**	-9%

III. WEATHER NORMALIZATION

Q. What is weather normalization?

A. Weather normalization is the adjustment of space heating usage to a period-specific normal temperature scenario using the correlation between space heat consumption and HDD. The normalization is a relatively simple calculation: an HDD factor is multiplied to the difference between actual HDD and NHDD, and the result is added to the original usage total. When HDD is lower than NHDD, the actual temperature is warmer than the assumed normal, and the difference is positive, resulting in an upward adjustment to usage to account for lower space heating volume. Conversely, when HDD is higher than NHDD, the actual temperature is colder than normal, and the difference is negative, yielding a downward adjustment to usage, assuming that space heating volume would have been lower under normal temperature.

There are two practical methods for calculation of the HDD factor: First, it can be calculated as a simple average of temperature-sensitive load per HDD for the period of consumption. When this calculation is used, the temperature-sensitive load is derived by estimating baseload – consumption for end uses not sensitive to temperature, such as water heating or cooking – and subtracting it from the usage. What remains is assumed to be temperature-sensitive load and is divided by the HDD total for the usage period. The division result is the HDD factor. Second, the factor can be estimated as a linear regression coefficient of the HDD value as an independent variable against usage as the dependent variable. When this approach is used, the regression intercept is typically used as the baseload value.

The Company has adopted the first method of estimating the HDD factor for weather normalization discussed above for three key reasons: First, any change in consumption behavior by a customer will immediately be captured and applied to normalization of the customer's usage. An example of such a behavioral change is a material decline in consumption because of the installation of a highly efficient gas-fueled appliance such as a high-efficiency furnace, a dual-fuel air source heat pump, or a tankless water heater. Changes in the rate of consumption that may occur in shoulder months are also better expressed through a period-specific HDD factor. Second, this approach does not require a long history of consumption as a linear regression approach does and is therefore suitable for a new customer. Third, the Company's billing system automates the calculation of the simple HDD factor and the normalization of usage for each GS customer. To facilitate this automation, the HDD derivation and weather normalization algorithms must be sufficiently pragmatic for technical implementation and suitable for a variety of customer data sets that can vary in length but are limited to monthly billable usage totals.

Q. Does weather normalization have limitations?

A. Yes. As explained in the preceding question, the adjustment is made using a fixed HDD factor. This is a simple average of dekatherms per HDD across the period from which is derived. An HDD factor unique to a customer and a billing period reflects changes in

consumption behavior from period to period. But it is possible for a customer's consumption behavior to change within a billing period because of a mid-period appliance upgrade or when high variability in temperatures occurs. In other words, a customer may consume gas at differing rates within a single billing period. The HDD factor then becomes a constant blend of those differing consumption rates and is used to normalize usage through the period of inconstant consumption rate.

A normalization algorithm that estimates and applies a variable HDD factor to a single billing period for each customer is unrealistic for automation. The billing system is operating on small sets of monthly billable usage by individual customers, and its normalization algorithm must be tenable for all such sets that it encounters. The Company is unaware of any peer that implements weather normalization with a mechanism more sophisticated than a fixed HDD factor. The Company believes that its approach of estimating a new HDD factor for each GS customer at every billing period is a pragmatic compromise that permits immediate recognition of a change in the consumption pattern from period to period.

Q. How long has the Company weather-normalized GS customer usage for billing?

A. The Company has been weather normalizing GS customer bills since the early 1990s to achieve revenue stabilization and to more closely synchronize monthly revenue with budget expectations and rate design set on forecasted usage. Further, the Company always analyzes long-run usage and derives forecasts on weather-normalized data to remove volatility from temperature variance period-to-period. Normalized data reveal underlying patterns in aggregate consumption such as increasing load from growth of the customer base or declining average usage over time from increasing proportions of energy-efficient appliances and housing shell characteristics.

Q. Is the Company's implementation of weather normalization unique?

A. No. In a March 2025 survey by the American Gas Association of its member utilities, all respondents replied that weather normalization is used. Half of respondents indicated that the adjustment is made at the customer level – the implementation the Company

uses. There was one nuance to the calculation identified in Pennsylvania, where the Commission has ordered utilities to not normalize usage from June 1st through September 30th. The Pennsylvania calculation is the only jurisdiction the Company found where this modification to the WNA calculation was being applied. The survey results are provided as Exhibit 6.03. Note: the Company provided a response to this survey which has been excluded from the summary totals cited in this testimony.

Q. Why does the Company continue to weather normalize GS customer usage for billing when the Conservation Enabling Tariff ("CET") provides the means to recover allowed revenue from the class?

A. Because the Company sets GS class rates, and consequently allowed revenue per customer, on forecasted normal-temperature usage, weather normalization brings the usage and revenue closer to forecasted levels. This removes monthly variance from allowed revenue attributable to temperature variance and helps to reduce over or under collection in CET balancing that must be amortized.

IV. REDUCTION OF NHDD BASE PERIOD LENGTH

Q. Why is the Company proposing an NHDD base period of 10 years rather than 20?

A. Over the past 11 years, 78% of the monthly weather normalization adjustments to the GS rate class revenue have been positive. That means it is most frequently the case that daily temperatures in winter and shoulder months are warmer than the Company's established average, and GS customer usage consequently falls below the established normal baseline and must be adjusted upward to recover expected volumetric revenue. While the Company's CET prevents revenue collection above that which is allowed by Commission order, the high frequency of positive adjustments is nonetheless an indication that the Company's current base period is not in alignment with the much warmer temperatures occurring during the heating season in recent years.

The Company tried to remedy this disconnect when it last reset NHDD by shrinking the normal base period from its long-running 30-year standard to 20 years. The choice of a

20-year period was intended to allow recent warm winters greater influence in the NHDD result while still including a history long enough to provide stability in averaging. While the adjustment did lower the NHDD levels in winter months, the continued frequency of positive adjustments, some atypically large, suggests that a 20-year period has not incorporated warm winters sufficiently to reduce the frequency and magnitude of upward weather normalization adjustments to GS revenue.

Reducing the base period span to 10 years gives the recent warm winters more influence in the HDD averaging and lowers the normal baseline in the winter months. This reduces the magnitude of upward adjustments when winter months are atypically warm, and it potentially increases the occurrence of downward adjustments, bringing the distribution of adjustments into a better balance.

Q. Do other utilities normalize to a 10-year NHDD base?

A. Yes. In the AGA survey referenced earlier (Exhibit 6.03), four of the ten respondents currently use a 10-year base, and a fifth indicated it has proposed adopting a 10-year base in a pending rate case. Other respondents reported either a 20 or 30-year base; one reported bases ranging from 10 to 30 years for different jurisdictions across service territories. It should also be noted that the Company uses a 10-year base for weather normalization in its Wyoming service territory.

Q. Has the Company analyzed the effect of the proposal on the weather normalization revenue adjustment?

A. Yes. Billed GS customer usage for the years 2023 and 2024 was collected and re-adjusted using the proposed 10-year NHDD. Base distribution non-gas volumetric rates currently in effect were then applied to both the original normalized usage and the re-adjusted usage to calculate the revenue change. The 2023 and 2024 weather-normalized revenues were decreased by $11.2 million and $7.6 million, respectively (see EGU Exhibit 6.02). As Mr. Mendenhall explains in his testimony, since the last rate case, the Company has been over-recovering revenue through the CET mechanism, and it is being

returned to customers through the amortization. We believe that the proposed change to weather normalization could help to reduce large over-collections going forward.

V. CONCLUSION

Q. Please summarize your testimony.

A. The weather normalization adjustment to GS class revenue is an important stabilizing mechanism that aligns monthly revenue collection from the class to budget planning and rate design expectations. It also reduces wide variance from monthly allowed revenue under the Company's CET.

In recent years, warm winter months have increased the frequency and magnitude of upward weather normalization adjustments, motivating a resetting of NHDD by shifting the base period forward to end of December 31, 2024 and reducing the span of the base period from 20 years to 10. This recalibration will give warm winters greater influence in HDD derivation and better align the NHDD with levels observed more frequently in recent years. The effects are a reduction in the magnitude of upward adjustments and a better balance in the distribution of upward and downward adjustments.

Q. Does this conclude your testimony?

A. Yes.

State of Utah)

) ss.

County of Salt Lake)

I, David C. Landward, being first duly sworn on oath, state that the answers in the foregoing written testimony are true and correct to the best of my knowledge, information, and belief. Except as stated in the testimony, the exhibits attached to the testimony were prepared by me or under my direction and supervision, and they are true and correct to the best of my knowledge, information, and belief. Any exhibits not prepared by me or under my direction and supervision are true and correct copies of the documents they purport to be.

David C. Landward

SUBSCRIBED AND SWORN TO this 1st day of May, 2025.

Notary Public

RENA PORTER
Notary Public State of Utah
My Commission Expires on:
April 25, 2027
Comm. Number: 730504