

**Gazifere Inc.**

**Written testimony of Joel Denomy**  
**In response to FCEI's Contention That "Normal Weather" Should Be Used, Not**  
**Actual Degree Days**

**The Rate Setting Process**

A basic premise of utility rate setting is to allow the utility to recover in rates those costs associated with providing distribution services. However, the rates that are charged are not only a function of the costs expected to be incurred by the utility but also distribution system utilization by the customers the utility serves. Consequently it is also important to have an expectation of demand by these customers such that rates can be set for a given test year. Put very simply the rate charged by a utility is simply its revenue requirement divided by expected demand. In Gazifere's case this simplified example can be expressed as:

$$Rate = \frac{Revenue\ Requirement}{Gas\ Demand}$$

The expected gas demand obviously plays a very important role in determining the rates charged by Gazifere. Higher natural gas demand will decrease rates while lower gas demand will increase rates.

Perhaps the most important variable for determining natural gas demand for Gazifere is degree days. A forecast of gas demand is required to set rates. Consequently a forecast of degree days is required to set Gazifere's gas demand budget. In order to forecast gas demand accurately Gazifere requires an accurate forecast of degree days.

**What is Normal Weather for a Utility?**

Accurate forecasts are required to set rates appropriately. In regulatory parlance the utility must produce a forecast of natural gas demand using "normal weather". Normal weather in turn is the number of expected degree days for a given test year. As discussed above an accurate forecast of degree days is required to forecast natural gas demand accurately. Thus, the forecast of normal weather is the utilities best forecast, at the time, of what it expects the number of degree days will be for a given test year. All else equal the closer the forecast of degree days is to actual, the closer the volumes forecast will be to actual. Normal weather is the expectation of actual weather for the purpose of setting rates. They are one in the same.

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## **Normalization Account**

Gazifere would like to have a balance of zero in this account each and every year. In order to do so this would require a degree day forecasting method that forecasts the actual weather experience 100% correctly 100% of the time. While the Company would like its forecast of degree days to be exactly the same as actual degree days for each year this will inevitably not be the case. Thus, the weather variance account tracks the monetary impacts of deviations in forecast weather from actual weather. The calculation of the monetary amounts which enter into the weather variance account, by necessity, must compare actuals to forecast.

Suggesting that the Company's analysis presented in exhibit GI-14 Document 4 is incorrect because it should take into account normal weather (whatever FCEI's definition of normal weather is) indicates a gross misunderstanding of the rate setting process for Gazifere. Normal weather for the purpose of setting rates is the Company's expectation of what actual weather will be for a given test year. Consequently, when assessing degree day forecasting methods one must compare forecasts to actuals. The analysis in Exhibit GI-14 Document 4 is done correctly.

## **Other "Normal Weather" Definitions**

There is one other concept that should be addressed which calls into question the position taken by FCEI. For the purpose of setting utility rates normal weather is the expectation or forecast of actual weather for a given test year. Climatologists however define "normal weather" in very different terms. Environment Canada defines normal weather as the 30 year average of weather or degree days in this case. This definition currently uses data for the years 1971 to 2000.

If FCEI is using Environment Canada's definition of normal weather this calls into question why they would be supporting the use of the 20 year trend method. A point raised throughout FCEI's evidence is that global warming is occurring and that the 20 year trend best captures this trend. To suggest Environment Canada definition of normal weather should be used rather than actual weather in the analysis suggests implies that FCEI is now saying that global warming is not occurring. A 30 year average of weather will clearly not reflect recent actual weather experience if temperatures are trending up (i.e. degree days are trending down).

**CONCLUSION - FOR THE REASONS OUTLINED ABOVE: FOR THE PURPOSE OF SETTING UTILITY RATES "NORMAL WEATHER" IS THE COMPANY'S BEST ESTIMATE OF WHAT ACTUAL WEATHER WILL BE FOR A GIVEN TEST YEAR. CONSEQUENTLY WHEN COMPARING DEGREE DAY FORECASTING METHODS ONE MUST COMPARE THE FORECASTS PRODUCED BY EACH METHOD TO THE ACTUAL DEGREE DAY EXPERIENCE.**

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