

Exhibit No. ____ T (YKGM-1T)
Docket No. UG-060265
Witness: Yohannes K.G. Mariam

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**CASCADE NATURAL GAS
CORPORATION,**

Respondent.

DOCKET NO. UG-060265

**ERRATA TO TESTIMONY OF
YOHANNES K.G. MARIAM, PH.D.**

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

September 25, 2006

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II. SCOPE OF TESTIMONY

Q. What is the scope of your testimony?

A. I present staff’s recommendation regarding Cascade’s proposed temperature normalization adjustment, including the impact on the Company’s proforma revenue requirement. I also present staff’s recommendations with respect to Cascade’s natural gas cost of service model.

III. SUMMARY OF TESTIMONY

Q. Please summarize staff’s temperature normalization adjustment.

A. Staff proposes changes to the Company’s temperature normalization adjustment that will increase Cascade’s normalized test year natural gas consumption by 7,140,504 therms. This results in an increase in Cascade’s proforma revenue of about \$1,527 million. (Exhibit No. ___ (YKGM-2), Tables 1, 3, 4, 5, 6, 7, and 8). Mr. Parvinen’s testimony presents the overall revenue and rate impact of this adjustment.

The Commission has consistently determined normal temperatures by using the most recent 30 years of actual temperature data published by the National Oceanographic and Atmospheric Administration (NOAA). Cascade proposes to replace this long-established methodology with one that uses data from a simple linear statistical model to estimate 55 years of data (1951 to 2005). Cascade contends that its proposal is intended to account for the effects of global warming. However, Cascade’s

1 **Q. Please summarize the impact of staff's proposed changes to Cascade's weather**
2 **normalization method.**

3 A. Staff's proposed changes to the Company's temperature normalization adjustment
4 produce statistically robust estimates (Exhibit No. ____ (YKGM-2), Table 1). The
5 proposed changes increase Cascade's normalized test-year natural gas consumption
6 by 7,140,504 therms ((Exhibit No. ____ (YKGM-2), Tables 3, 4, 5, 6, 7, and 8). This
7 results in an increase in Cascade's proforma revenue of about \$1,527 million.

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9 **Q. Please explain the robustness of staff's proposed temperature normalization**
10 **method.**

11 A. Staff's analysis shows that the actual versus estimated use per customer (UPC) was
12 54.27 and 56.05 therms per month for residential and 283.25 and 286.71 therms per
13 month for commercial customers, respectively. These results show a variation
14 between actual and estimated UPC of about two percent to four percent (Exhibit No.
15 ____ (YKGM-2, Table 2). This level of accuracy can be considered robust given that
16 the data is monthly and not daily, and the time period used is only five years.

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18 **Q. Please summarize the weather normalization methodology that staff**
19 **recommends Cascade should use.**

20 A. Staff recommends that Cascade submit to the Commission the results of a weather
21 normalization study based on at least five years of daily or 10 years of monthly rate
22 schedule data by service territory. Cascade should implement a robust statistical model