GENERAL RULES AND REGULATIONS

(continued)

(C)

(D)

**Rule 11. Determination of Thermal Units. (continued)**

Temperature Factor (TF) is an average determined from representative samples of metering temperatures for the billing period. Temperature information for most accounts will be obtained from daily temperature data for the weather stations specified in this **Rule 11,** aspublished daily by third party sources. The temperature factor might alternatively be applied through on-site temperature compensating devices or other temperature recording equipment.

 Temperature Factor = 520

 (Metering Temperature °F + 460)

Temperature data will be based on the daily temperatures reported for the following weather stations. Each weather station corresponds to three weather zone assignments within the Company’s Washington service territory. Each account is assigned a weather zone based upon where the Customer’s premise is located on the plat map. Plat map data is electronically downloaded into the Company’s Customer Information System (CIS) from data received from the respective County Assessors Office. In most cases, the weather zone will correspond with the assigned service district.

|  |  |
| --- | --- |
| Weather Station | NWN Weather Zone |
| Vancouver (458773) | Clark County & Western Skamania County |
| Hood River Oregon AgriMet Weather Station (HOXO) | Eastern Skamania County and Klickitat County |

If at any time the temperature data is not available for any of the listed weather stations, the Company will use a substitute station and associated basis temperature differentials, where applicable, in accordance with Company policy. For billing purposes, the Company will use the daily temperatures that are reported by the third party each day. The Company will not be required to issue corrected bills to customers when any of the reported data is later changed by the reporting party.

Compressibility Ratio (CR) will be calculated in accordance with American Gas Association (AGA) recommendations. The CR is dependent on pressure, temperature and gas composition. At very high metering pressures, the value becomes significant (about 1.100 at 500 PSIG). For larger volume Customers, the CR may be applied through on-site equipment. At low metering pressures it has a value close to about 1.000, and an approximation is used.

##  Compressibility Ratio (CR) = 1 + Metering Pressure / 6000

The Btu Multiplier, Btu per standard cubic foot (Btu/Scf) is Gross Heating Value, measured at 60 degrees, at 14.73 PSIA and without water vapor, in accordance with AGA methods. Energy content of natural gas supplied to the customer shall be measured, typically at the Company's receipt and storage points. The Btu multiplier for a billing period will be computed based on the appropriate gas source during the billing period.

(continue to Sheet 12.1)