

**MISSOURI GAS ENERGY CASE NO. GR-2006-0422 HEARING  
AFTERNOON SESSION, JANUARY 10, 2007  
STAFF RESPONSE TO REQUEST BY COMMISSIONER GAW**

**DATA REQUESTED: COMPARISON OF NORMAL WEATHER MEASURES FOR  
TWO DIFFERENT 30-YEAR TIME PERIODS FOR TWO WEATHER STATIONS**

The following schedule compares the annual heating degree-days[1] for Kansas City International Airport and Springfield Regional Airport for the NOAA[2] 30-year period 1971-2000 and for the 30-year period 1976-2005 requested by Commissioner Gaw.

Kansas City International Airport			
1971-2000 Annual HDD	1976-2005 Annual HDD	Difference	Percentage difference
5273	5203	-70	-1.33%

Springfield Regional Airport			
1971-2000 Annual HDD	1976-2005 Annual HDD	Difference	Percentage difference
4585	4601	16	0.35%

**FILED<sup>2</sup>**

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**Missouri Public  
Service Commission**

[1] A daily heating degree-day (HDD) is a measure of how far the daily average temperature departs from the base level of 65 degrees Fahrenheit. Annual heating degree-days is the sum of the 365 daily daily HDDs.

[2] Source: National Oceanic and Atmospheric Administration, U.S. Climate Normals by Station 1971-2000

NOTE: Staff's weather normalization process uses test year daily HDDs to determine the relationship between (actual) gas usage and (actual) weather. Using NOAA normal HDDs as an input to this weather-gas usage relationship, Staff determines what sales would have occurred in the test year under normal weather conditions. The final step in the weather normalization process is to determine the effect that the change in sales had on test year revenues.

Staff witness Curt Wells is responsible for the computation of both test year daily HDDs and daily normal HDDs. Staff witness James Gray is responsible for modeling the gas usage-weather relationship and computing normal sales. Staff witness Henry Warren is responsible for determining the effect of the weather normalization of sales on billing units by rate block. The effect of weather normalization on rate revenues was computed by Staff witness Paul Harrison.

Since only Mr. Wells was asked to provide a response to Commissioner Gaw, Staff has interpreted the request to only include the effect of changing the 30-year normal time period on annual normal HDDs. If the effect of this change on other aspects of Staff's case was Commissioner Gaw's intent, Staff needs further clarification.

*Staff*  
Exhibit No. 109-A  
Case No(s). GR2006-0422  
Date 1-11-07 Rptr TU