Exhibit No.:	
Issues:	Weather Normalization
Witness:	Henry E. Warren
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Direct Testimony
Case No.:	GR-2006-0387
Date Testimony Prepared:	September 13, 2006

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

OF

HENRY E. WARREN

ATMOS ENERGY CORPORATION

CASE NO. GR-2006-0387

Jefferson City, Missouri
September 2006

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Atmos Energy Corporation's Tariff Revision Designed to Consolidate Rates and Implement a General Rate Increase for Natural Gas Service in the Missouri Service Area of the Company.	))))))	Case No. GR-2006-0387

AFFIDAVIT OF HENRY E. WARREN

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Henry E. Warren, of lawful age, on his oath states: that he has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 4 pages of Direct Testimony to be presented in the above case, that the answers in the following Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Henry E. Warren

Subscribed and sworn to before me this 12th day of September, 2006.

ROSEMARY R. ROBINSON
Notary Public - Notary Seal
State of Missouri
County of Callaway
My Commission Exp. 09/23/2008

Notary Public

My commission expires 9-23-2008

DIRECT TESTIMONY

OF

HENRY E. WARREN

ATMOS ENERGY CORPORATION

CASE NO. GR-2006-0387

Q. Please state your name and business address.

A. My name is Henry E. Warren and my business address is P. O. Box 360, Jefferson City, Missouri, 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (PSC or Commission) as a Regulatory Economist in the Energy Department of the Utility Operations Division.

Q. How long have you been employed by the Commission?

A. I have worked at the Commission fourteen years.

Q. What is your educational and professional background?

A. I received my Bachelor of Arts and my Master of Arts in Economics from the University of Missouri-Columbia, and a Doctor of Philosophy (PhD) in Economics from Texas A&M University. Prior to joining the PSC Staff (Staff), I was an Economist with the U.S. National Oceanic and Atmospheric Administration (NOAA). At NOAA I conducted research on the economic impact of climate and weather. I began my employment at the Commission on October 1, 1992, as a Research Economist in the Economic Analysis Department. My duties consisted of calculating adjustments to test-year energy use based on test-year weather and normal weather, and I also assisted in the review of Electric Resource

Plans for investor owned utilities in Missouri. From December 1, 1997, until May 2001, I was a Regulatory Economist II in the Commission's Gas Department where my duties still included analysis of issues in natural gas rate cases and were expanded to include reviewing tariff filings, applications and various other matters relating to jurisdictional gas utilities in Missouri. On June 1, 2001, the Commission organized an Energy Department and I was assigned to the Tariff/Rate Design Section of the Energy Department. My duties in the Energy Department include analysis of issues in natural gas rate cases, tariff filings, applications and various other matters relating to jurisdictional gas utilities in Missouri as well as tariff filings, review of Electric Resource Plans, and review of Regulatory Plans for investor owned electric utilities in Missouri. I have also served on Task Forces, Collaboratives, and Working Groups dealing with issues relating to jurisdictional natural gas and electric utilities.

Q. Are you a member of any professional organizations?

A. Yes, I am a member of the International Association for Energy Economics and the Western Economics Association.

Q. Have you previously filed testimony before the Commission?

A. Yes, I have filed testimony in the cases listed in Schedule 1 attached to this testimony.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the selection of weather stations to be used in conjunction with adjustments to test year sales volumes to reflect normal temperature patterns for the Missouri operational divisions of the Atmos Energy Corporation

(Atmos or Company). The procedure of adjusting test year revenues to reflect normal temperature patterns is commonly termed weather normalizing test year sales.

Q. What is Staff's opinion regarding the weather stations that should be used in weather normalizing test year sales?

A. It is Staff's opinion that the weather stations used should be recognized and documented by the National Oceanic and Atmospheric Administration (NOAA) and the stations should be in or near the population centers of the Company's operational divisions. These weather stations should have reliable observations of current temperatures and a record of observations that is long enough and complete enough to have monthly normal temperatures computed by NOAA for the current normal period which is 1971-2000. Staff witness Mr. Curt Wells will address Staff's use of the thirty year time period for the calculation of normal weather and the difference between the First Order weather stations and the Co-operative weather stations which were used. Mr. Wells participated in the process of the identification, evaluation, and selection of stations for weather normalization.

Q. What are the geographic characteristics of the Atmos service areas and operational divisions in Missouri?

A. The Atmos service areas are shown in the Missouri map in Schedule 2.

The map shows service area locations in the state, Area K -- Kirksville and communities in three counties; Area P – Palmyra; Area U (northeast) Hannibal-Canton, Bowling Green, and communities in seven counties, Area U (southeast) Neelyville and communities in two counties; Area (S) SEMO including Jackson, Sikeston, Malden, Caruthersville and communities in ten counties, Area B – Butler and communities in four counties, and Area G – Rich Hill-Hume.

Q. How were the weather stations determined for the service areas?

A. Schedule 3 contains the Service areas and the stations used in the weather normalization of the test year volumes. The smaller service areas were assigned one weather station: Area K – Kirksville, Area P – Palmyra, Area U (southeast) – Poplar Bluff, Area B – Butler, and Area G -- Butler. For the two largest service areas, Area U (northeast) and Area S (SEMO) two composite weather data sets were computed using three weather stations each in the service areas. In both of these areas, because of the number of communities, the small size of the communities, the dispersion of the communities, and the limited number of adequate weather stations, it was determined that a composite would be better than subdividing the areas or only using one weather station for each area.

These two composite weather data sets were computed based on the proportion of customers near the available weather stations: NE-Area U (northeast) Hannibal (.414), Kirksville (.274), and Steffenville (.312); and SE-Area S (SEMO) Cape Girardeau (.500), Caruthersville (.400), and Poplar Bluff (.100).

Q. How were the weather data computed for the selected stations and the volumes adjusted for normal weather based on the weather data?

A. The selected stations were furnished to Mr. Wells who compiled the required weather data sets for weather normalization. Mr. Timothy Peterson, Staff, used the station weights to determine the composite station data and calculate adjustments to normal volumes for the service areas. Staff Witness Mr. James Gray is sponsoring the analysis done by Mr. Peterson.

Q. Does this conclude your direct testimony?

A. Yes, it does.

THE ATMOS ENERGY CORPORATION

CASE NO. GR-2006-0387

PREVIOUS CASES IN WHICH PREPARED TESTIMONY WAS PRESENTED BY:

HENRY E. WARREN, PHD

COMPANY NAME	CASE NUMBER
St. Joseph Light and Power Company	GR-93-042[1]
Laclede Gas Co.	GR-93-149
Missouri Public Service	GR-93-172[1]
Western Resources	GR-93-240[1]
Laclede Gas Co.	GR-94-220[1]
United Cities Gas Co.	GR-95-160[1]
The Empire District Electric Co.	ER-95-279[1]
Laclede Gas Co.	GR-96-193[1]
Missouri Gas Energy	GR-96-285[1]
The Empire District Electric Co.	ER-97-081[1]
Union Electric Co.	GR-97-393[1]
Missouri Gas Energy	GR-98-140[1]
Laclede Gas Co.	GR-98-374[1]
St. Joseph Light & Power Company	GR-99-246[1]
Laclede Gas Co.	GR-99-315[1]
Union Electric Company (d/b/a AmerenUE)	GR-2000-512[1]
Missouri Gas Energy	GR-2001-292[1]

PREVIOUS CASES IN WHICH PREPARED TESTIMONY WAS PRESENTED BY:

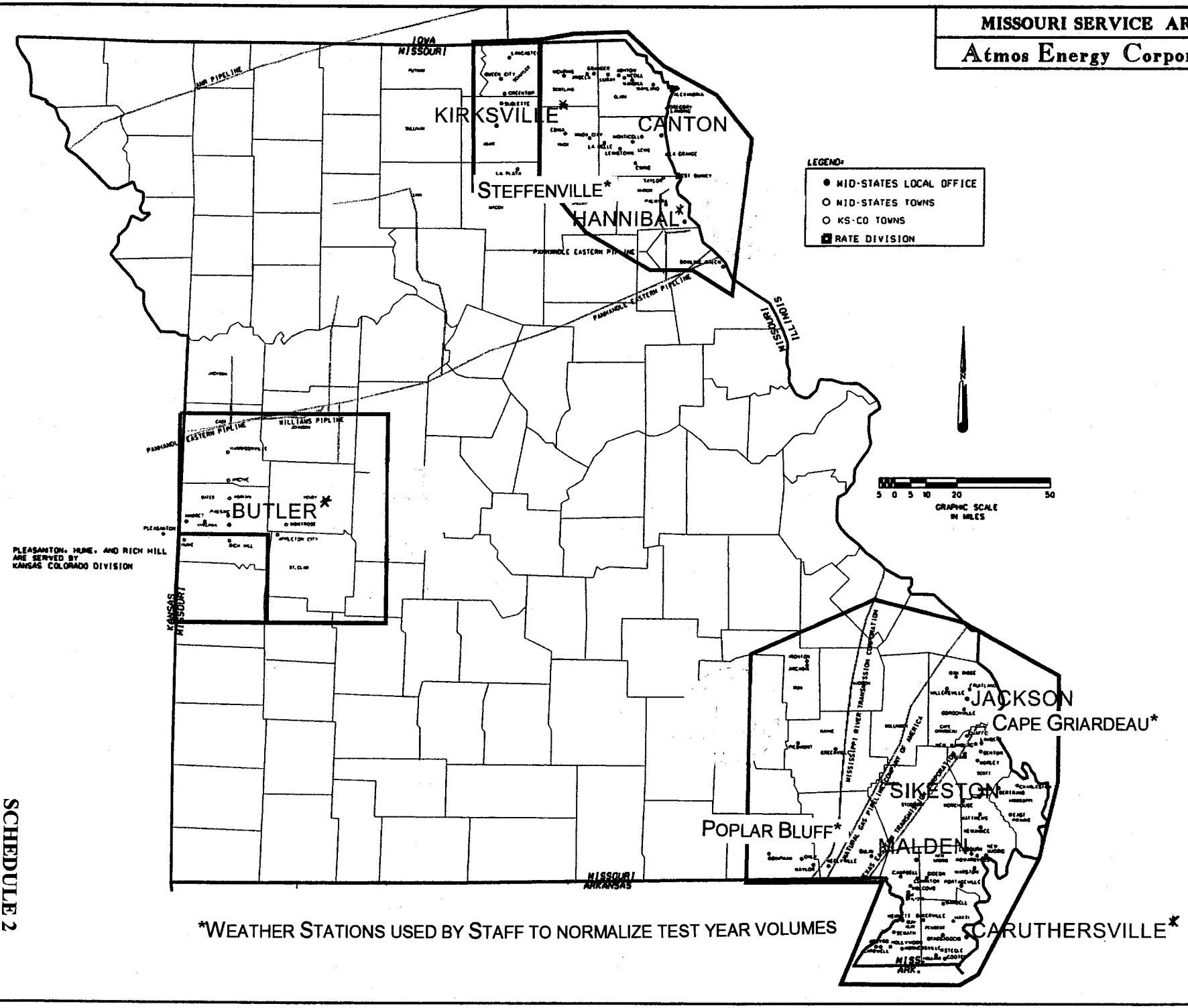
HENRY E. WARREN, PHD

(CONTINUED)

COMPANY NAME	CASE NUMBER
Laclede Gas Co.	GR-2001-629[1]
Laclede Gas Co.	GR-2002-0356[1]
Laclede Gas Co.	GT-2003-0117
Aquila Networks (MPS and L&P)	GR-2004-0072[1]
Missouri Gas Energy	GR-2004-0209
The Empire District Electric Company	ER-2006-0315

[1] Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

MISSOURI SERVICE AREAS
Atmos Energy Corporation



*WEATHER STATIONS USED BY STAFF TO NORMALIZE TEST YEAR VOLUMES

SCHEDULE 2

ATMOS ENERGY CORPORATION
Case No. GR-2006-0387

Weather Stations Used to Normalize Test Year Volumes

Atmos Service Area (Number of Counties)	Primary City(ies)	Weather Station(s)
Area K (3)	Kirksville	Kirksville
Area P (1)	Palmyra	Hannibal
Area U		
northeast (7)	Hannibal Canton Bowling Green	NE-Weighted Composite 0.414 Hannibal 0.274 Kirksville 0.312 Steffenville
southeast (2)	Neelyville	Poplar Bluff
Area G (1)	Rich Hill	Butler
Area B (4)	Butler	Butler
Area S (SEMO) (10)	Jackson Sikeston Malden Caruthersville	SE-Weighted Composite 0.500 Cape Girardeau 0.400 Caruthersville 0.100 Poplar Bluff