

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**  
**APPENDICES**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

*Jefferson City, Missouri*  
*June 4, 2010*

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**

**APPENDIX 1**  
**Staff Credentials**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

# APPENDIX 1

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# **Kim Cox**

## EDUCATION

Bachelor of Science

Central Missouri State University, Warrensburg, MO – May 1996

## PROFESSIONAL EXPERIENCE

I am currently employed as a Rate and Tariff Examiner III for the Missouri Public Service Commission (Commission). I began my employment with the Commission on July 13, 2009. Before coming to the Commission I was in the regulatory field for ten years where I held the position of a Quality Assurance Analyst.

Since starting with the Commission I have completed the Consumer Affairs Training held by NARUC and Economics of Efficiency and Demand Response.

I have provided a Staff Recommendation on the following:

- Missouri Gas Utility Certificate of Convenience and Necessity case GA-2010-0012;
- Missouri Gas Utility Certificate of Convenience and Necessity, case GA-2010-0189;
- Laclede Gas Company Winter Season PGA, case GR-2010-0138;
- Union Electric d/b/a Ameren UE Winter PGA, case GR-2009-0337.

I have provided written testimony on the following:

- Weather-Normalized Sales and Coincident-Peak-Day Demand for The Empire District Gas Company, case GR-2009-0434;
- Weather-Normalized Sales and Coincident-Peak-Day Demand for Laclede Gas, case GR-2010-0171.

**James R. Dittmer**  
Utilitech, Inc. - Senior Consultant

B.S., Business Administration (Accounting)  
University of Missouri - Columbia (1975)

Certified Public Accountant Examination (1980)

**GENERAL**

Professional experience has consisted exclusively of consultation in technical utility rate matters. For the past thirty-one years, Mr. Dittmer has been representing clients intervening in utility rate applications before various federal and state regulatory agencies. In representing those clients, Mr. Dittmer has performed revenue requirement studies for electric, gas, water and sewer utilities and has testified as an expert witness on a variety of rate issues.

In addition to his work in utility rate applications, Mr. Dittmer has had extensive work in power supply studies, financial studies and projected cost of service studies for electric utility operating systems. Such studies were performed in conjunction with evaluations of alternative power supplier and/or power supply arrangements for large governmental or municipal loads.

Mr. Dittmer has served as a member of a Department of Energy project team organized to study alternative natural gas purchase arrangements, transportation arrangements, as well as benefits of conservation and peak shaving. He has been engaged in municipal utility acquisitions of water and sewer systems which were formerly publicly owned. Additionally, Mr. Dittmer has experience in establishing and maintaining computerized utility bill audit programs and utility data management systems.

As a consultant Mr. Dittmer has presented testimony to various regulatory agencies in Alaska, Arizona, Colorado, Florida, Hawaii, Indiana, Kansas, Maine, Michigan, Mississippi, Missouri, Nevada, New Mexico, New York, Ohio, Oklahoma, Oregon, Texas, Washington, and West Virginia. Mr. Dittmer has testified on a multitude of complex revenue requirement and cost of service issues, including fuel cost recovery, plant phase-in plans, income tax accounting, cash working capital and financial condition. His responsibilities have often included full case responsibility for overall revenue requirements, including all underlying accounting issues.

Prior to working as a consultant, Mr. Dittmer worked for four years as a Staff Auditor for the Missouri Public Service Commission. At the time of his resignation, Mr. Dittmer was Accounting Manager for the Kansas City Office of the Missouri PSC. In that capacity he supervised work of other accounting professionals and was responsible for coordinating Staff rate filings for all utility applications in the western third of the state. Additionally, Mr. Dittmer played an active part in the formulation and implementation of Accounting Staff policies.

## WORK HISTORY

9/79 – Present **Senior Consultant** - Utilitech, Inc. (and predecessor corporation -- Dittmer, Brosch and Associates, Inc.)

Evaluate requested rate increases by investor owned public utilities. Primary objective of the evaluation is to propose a proper rate increase which will allow utility companies to collect sufficient revenues to cover allowable expenses and give a reasonable rate of return to their investors. Formal intervention by filing testimony and exhibits before various state administrative agencies. Continuing utility bill audits and monitoring of several states' regulatory affairs affecting supply, demand and cost of energy. Performed computerized projected cost of service studies and computerized utility bill audits.

3/78 - 9/79 **Accounting Manager** - Missouri Public Service Commission

Delegated work to seven rate accountants. Supervised all audits performed in western third of the state of Missouri. Played an active part in the formulation and implementation of accounting staff policies.

8/75 - 3/78 **Auditor** - Missouri Public Service Commission

Involved in rate case, fuel and purchase power adjustment clause audits.

## OTHER QUALIFICATIONS

- Member - American Institute of Certified Public Accountants
- Beta Alpha Psi, professional accounting scholastic fraternity
  
- Instructor - INFOCAST Ratemaking Course
- Arizona Staff Training Program

## Summary of Testimonies Filed by James R. Dittmer

<u>Utility</u>	<u>Jurisdiction</u>	<u>Agency</u>	<u>Docket/Case Number</u>	<u>Represented</u>	<u>Addressed</u>
Missouri Public Service Company	Missouri	PSC	ER-78-29 ER-79-59 ER-79-60	Staff	Operating Income, Rate Base
Mobile Radio Communications	Missouri	PSC	18,764	Staff	Operating Income, Rate Base
Raytown Water Company	Missouri	PSC	WR-78-4	Staff	Operating Income, Rate Base
Rich Hill-Hume Gas Co.	Missouri	PSC	GR-77-17	Staff	Operating Income, Rate Base
Hickory Hills Service	Missouri	PSC	18,091	Staff	Operating Income, Rate Base
Empire District Electric Company	Missouri	PSC	18,713	Staff	Operating Income, Rate Base
St. Louis County Sewer	Missouri	PSC	18,535	Staff	Operating Income, Rate Base
Martigney Creek Sewer	Missouri	PSC	18,732	Staff	Operating Income, Rate Base
Kansas City Power & Light Company	Missouri	PSC	18,433	Staff	Operating Income, Rate Base
Dayton Power & Light Company	Ohio	PSC	ER-78-252 79-510-EL-AIR	Federal Executive Agencies (FEA)	Operating Income, Rate Base
Indiana and Michigan Electric Company	Michigan	PSC	U-614B	Michigan Industries	Operating Income, Rate Base
Gas Service Company	Missouri	PSC	GR-80-173	FEA	Rate Design
Upper Peninsula Power Co	Michigan	PSC	U-6456	University	Operating Income, Rate Base
Florida Power Corporation	Florida	PSC	8000119-EU	FEA	Operating Income, Rate Base
Kansas City Power & Light Company	Missouri	PSC	ER-81-41	FEA	Operating Income, Rate Base
Dayton Power & Light Company	Ohio	PSC	80-687-EL-AIR	FEA	Operating Income, Rate Base
Upper Peninsula Power Co.	Michigan	PSC	U-6785	University	Operating Income, Rate Base
Florida Power & Light Company	Florida	PSC	810002-EU	Public Counsel	Operating Income, Rate Base
Missouri Cities Water Co.	Missouri	PSC	WR-81-280	Cities	Operating Income, Rate Base
Dayton Power & Light Company	Ohio	PSC	81-21-EL-AIR	FEA	Operating Income, Rate Base
Gulf Power Company	Florida	PSC	810136-EU	Public Counsel	Operating Income, Rate Base
Kansas City Power & Light Company	Missouri	PSC	82-66	FEA	Operating Income, Rate Base
Generic Hearing on Oil Backout Project Recovery Clause	Florida	PSC	820257-EU	Public Counsel	Accelerated recovery of transmission facilities

Florida Power & Light Company	Florida	PSC	820155-EU	Public Counsel	Operating Income, Rate Base
Dayton Power & Light Company	Ohio	PSC	81-1256-EL-AIR	FEA	Operating Income, Rate Base
Kansas City Power & Light Company	Missouri	PSC	ER-83-49 ER-85-128	FEA	Operating Income, Rate Base
Missouri Cities Water Co.	Missouri	PSC	WR-82-14	Citites	Operating Income, Rate Base
Dayton Power & Light Company	Ohio	PSC	81-517-EL-AIR	FEA	Operating Income, Rate Base
Ohio Power Company		FERC	ER-82-553-000	Municipalities	Operating Income, Rate Base
Generic Hearing on Fuel Adj. Recovery Clause	Florida	PSC	830001-EU	Public Counsel	Fuel Cost recovery
Arkansas Power & Light Company	Missouri	PSC	ER-83-206	Staff	Operating Income, Rate Base
Palm Coast Water Utilities	Florida	PSC	840092-WS	Public Counsel	Operating Income, Rate Base
Northern Indiana Public Service Company	Indiana	PSC	38045	Utility Consumer Counselor	Operating Income, Rate Base
Consumers Power Company	Michigan	PSC	U-8681	Industrials	Operating Income, Rate Base
Mississippi Power & Light Company	Mississippi	PSC	U-4620	Staff	Operating Income, Rate Base
Arizona Public Service Company	Arizona	PSC	U-1345-85-367 U-1345-88-033	Staff	Operating Income, Rate Base
Tucson Electric Power Company	Arizona	PSC	U-1933-88-090	RUCO	Proper fuel, purchase power recovery
Tucson Electric Power Company	Arizona	PSC	U-1933-88-280	RUCO	Proper fuel, purchase power recovery
West Virginia-American Water Company	West Virginia	PSC	88-143-W-42T	Staff	Operating Income, Rate Base
St. George Island Utility Co., Ltd.	Florida	PSC	871177-WU	Public Counsel	Operating Income, Rate Base
Florida Public Utilities	Florida	PSC	880558-EI	Public Counsel	Operating Income, Rate Base
Florida Public Utilities	Florida	PSC	881056-EI	Public Counsel	Operating Income, Rate Base
Indiana and Michigan Power Company	Indiana	PSC	38728	Utility Consumer Counselor	Operating Income, Rate Base
Indiana and Michigan Power Company	Indiana	PSC	39314	Utility Consumer Counselor	Operating Income, Rate Base
Puget Sound Power & Light	Washington	PUTC	U-3892688-T	Public Counsel	Operating Income, Rate Base
Utilicorp United d.b.a. Missouri Public Service	Missouri	PSC	ER-90-100	Staff	Operating Income, Rate Base
United Cities Gas	Kansas	PSC	176-717-U	CURB	Operating Income, Rate Base, Rate Design



Arizona Public Service Company	Arizona	PSC	U-1345-90-007	Staff	Operating Income, Rate Base
Arizona Public Service Company / PacifiCorp	Arizona	PSC	U-1345-90-269	Staff	Operating Income, Rate Base
Southern Union Gas Co.	Arizona	PSC	U-1345-90-248	RUCO	Mergers
Gas Company of New Mexico	New Mexico	PSC	E-1032-92-248 2307	Dept. of Energy (DOE)	Operating Income, Rate Base
Citizens Utility Co. - Kauai Electric Division	Hawaii	PUC	7003	Consumer Advocate	Operating Income, Rate Base
System Energy Resources Inc.	FERC	FERC	ER-90-16-000	Mississippi Public Service	Lead lag study
Montana Power Company	FERC	FERC	EL-90-10-000	CMEP Coop	Operating Income, Rate Base
Public Service Company of Colorado	Colorado	PUC	915-091EG	DOE	Operating Income, Rate Base
Utilicorp United, Inc. d.b.a. Missouri Public Service	Missouri	PSC	ER-93-37	Staff	Operating Income, Rate Base
Entergy Corporation/Gulf States Utilities Co.	Texas	OPC	11292	Public Counsel	Merger filing
Citizens Utilities NAGD	Arizona	ACC	E-1032-93-193	Staff	Rate Base
Washington Natural Gas	Washington	WUTC	AG-920840	Public Counsel	Materials & Supplies, Cash Working Capital
Indiana Michigan Power Company	Indiana	IURC	39314	Utility Consumer Counselor	Expenses, Fuel Inventory
KPL Gas Service	Missouri	MPSC	GR93-240	Public Counsel	Operating Income, Rate Base
Southwest Gas Corporation Southern Arizona Division	Arizona	ACC	U-1551-93-222	RUCO	Operating Income, Rate Base
Washington Natural Gas	Washington	WUTC	UG-931405	Public Counsel	Operating Income, Rate Base
Washington Natural Gas	Washington	WUTC	AG-931405	Public Counsel	Royalty imputation
Consolidated Edison	New York	NYPSC	94-E-0334	NYPA	Multi-year rate plan
Kansas Pipeline	Kansas	KCC	192-506-U	Overland Park, Kansas	Gas Contracts
Southwest Gas Corporation- Southern & Northern Nevada Divisions	Nevada	PSC	95-12015 and 95-12016	Consumer Advocate	Operating Income
UtiliCorp United, Peoples Natural Gas Division	Nebraska	Muni. Board	N/A	Rate Area I	Operating Income, Rate Base
Citizens Utilities Arizona Electric Division	Arizona	ACC	E-1032-95-433	RUCO	Operating Income, Rate Base
Tucson Electric Power Co.	Arizona	ACC	U-1933-97-176	ACC Staff	Affiliate interest rules

Southwest Gas Corporation	Arizona	ACC	U-1551-96-596	ACC Staff	Operating Income, Rate Base
Citizens Utilities Company	Arizona	ACC	E-1032-94-139	RUCO	AR-13 AFUDC Accounting
Public Service Company of New Mexico	New Mexico	NM – PRC	Case No. 2761	Albuquerque, New Mexico	Operating Income, Rate Base
Natural Gas Processing	New Mexico	NM – PRC	Case No. 2874	Las Vegas, New Mexico	Operating Income, Rate Base
Kansas City Power & Light	Kansas	KCC	97-WSRE-767-MER	Kansas municipals	Conditions for merger with Western Resources
Central Maine Power	Maine	MPUC	Docket No. 97-580	Public Counsel	Various Revenue Requirements
Nevada Power Company	Nevada	PSCN	Docket No. 97-7030	Consumer Advocate	Deferred fuel/ purchased power recovery
Nevada Power Company	Nevada	PSCN	Docket No. 98-7035	Consumer Advocate	Deferred fuel/purchased power recovery
Nevada Power Company	Nevada	PSCN	Docket No. 99-7035	Consumer Advocate	Deferred fuel/purchased power recovery
Oklahoma Natural Gas	Oklahoma	OCC	Cause No. 980000683	Okla. AG	Operating Income, Rate base
St. Louis County Water Co	Missouri	MPSC	WR-2000-844	Public Counsel	Cost Allocation Manual/ other rep'ting req'ts
Western Resources	Kansas	KCC	01-WSRE-436-RTS	Kansas Ind'l Consumer	Operating Income, Rate Base
Public Service Company of New Mexico	New Mexico	NM -- PRC	Case No. 3137	Albuquerque, New Mexico	Conditions for approval of holding company status
Northern Indiana Public Service Company	Indiana	IURC	Cause 41746	Office of Util. Cons. Counsel	Various revenue requirement
UtiliCorp United d/b/a Missouri Public Service	Missouri	MPSC	ER-2001-672	MO Public Counsel	Corporate Overhead Costs
Mississippi Power Co.	Mississippi	MPSC	01-UN-0548	Gulf Coast Gaming Asso.	Various revenue requirements
Western Resource	Kansas	KCC	01-WSRE-949-GIE	Kansas Ind'l Consumers	Restructuring requirements
Kansas Gas Service	Kansas	KCC	03-KGSG-602-RTS	Kansas Energy Group	Operating Income/Rate Base
Chugach Electric Coop	Alaska	RCA	U-01-108	Homer Electric Coop	Expenses, TIER coverag
Aquila	Iowa	IUB	RPU-0205	Office of Cons. Adv.	Corporate overhead costs
Aquila	Missouri	MPSC	ER-2004-0034	Public Counsel	Corporate overhead & severance costs
Ameren-UE	Missouri	MPSC	EC-2002-1	Pubic Counsel	Joint Dispatch Agree't
Arizona Public Service	Arizona	ACC	E-10345A-03-0437	Staff	Operating Inc./Rate Base

Kansas Gas Service	Kansas	KCC	03-KGSG-602-RTS	KS Indust'l Consumers	Operating Income/Rate Base
Portland General Electric/Oregon Electric	Oregon	OPUC	UM-1121	CUB	Leveraged buyout application
PacifiCorp/MidAmerican Merger	Washington/Oregon	WUTC/OPUC	UE-05-1090 UM 1209	Public Counsel/CUB	Merger
PacifiCorp Electric	Washington	WUTC	UE-032065	Public Counsel	Operating Income/Rate Base
Avista Electric & Gas	Washington	WUTC	UE-050482 UG-050483	Public Counsel	Operating Income/Rate Base
Aquila – Kansas Electric	Kansas	KCC	04-AQLE-1065-RTS	KS Indust'l Consumers	Operating Income/Rate Base
Westar Energy	Kansas	KCC	05-WSEE-981-RTS	KS Indust'l Consumers	Operating Income/Rate Base
Kansas City Power & Light Company	Missouri	MPSC	ER-2006-0314	DOE-NSSA	Operating income
Arizona Public Service Company	Arizona	ACC	E-01345A-05-0816	Staff	Operating Income/Rate Base
Nevada Power Company	Nevada	PUCN	06-11022	Attorney Gen'l- BCP	Operating Income/Rate Base
Kansas City Power & Light Company	Missouri	MPSC	ER-2007-0291	DOE-NSSA	Operating Income
Great Plains Energy/KCP&L/Aquila, Inc.	Missouri	MPSC	EM-2007-0374	Public Counsel	Detriments stemming from proposed merger
Public Service Company of New Mexico	New Mexico	NM PRC	07-0007-UT	Albuquerque & ABCWUA	Operating income and rate base
Westar Energy	Kansas	KCC	08-WSEE-309-PRE	KS Indust'l Consumers	Wind farm feasibility/Pre-approval Conditions
Sierra Pacific Power Company	Nevada	PUCN	07-12001	Attorney Gen'l – BCP	Operating Income/Rate Base
Public Service Company of New Mexico	New Mexico	NM PRC	08-00092-UT	ABCWUA	Emergency FPPCAC
Nevada Power Company	Nevada	PUCN	08-12002	Attorney Gen'l- BCP	Operating Income/Rate Base
Westar Energy	Kansas	KCC	08-WSEE-1041-RTS	KS Indust'l Consumers	Operating Income/Rate Base
Westar Energy	Kansas	KCC	09-WSEE-741-GIE	KS Indust'l Consumers	Operating Income/Rate Base
Westar Energy	Kansas	KCC	09-WSEE-925-RTS	KS Indust'l Consumers	Divisional rate consolidation
Puget Sound Energy, Inc	Washington	WUTC	UE-090704	Public Counsel	Abbreviated true-up rate filing
Kauai Island Utility Coop	Hawaii	HPUC	UG-090705 2009-0050	Consumer Advocate	Operating Income/Rate Base
					Operating Income/Rate Base

## **Thomas M. Imhoff**

### **Present Position:**

I am Rate & Tariff Examination Supervisor in the Energy Department, Operations Division of the Missouri Public Service Commission.

### **Educational Background and Experience:**

I attended Southwest Missouri State University at Springfield, Missouri, from which I received a Bachelor of Science degree in Business Administration, with a major in Accounting, in May 1981. I began employment with the Commission in October, 1981. In May 1987, I successfully completed the Uniform Certified Public Accountant (CPA) examination and subsequently received the CPA certificate. I am currently licensed as a CPA in the State of Missouri. Schedule 1 is a listing of cases that I have filed testimony in.

ATMOS ENERY  
CASE NO. GR-2010-0192

Summary of Cases in which prepared testimony was presented by:  
THOMAS M. IMHOFF

<u>Company Name</u>	<u>Case No.</u>
Terre-Du-Lac Utilities	SR-82-69
Terre-Du-Lac Utilities	WR-82-70
Bowling Green Gas Company	GR-82-104
Atlas Mobilfone Inc.	TR-82-123
Missouri Edison Company	GR-82-197
Missouri Edison Company	ER-82-198
Great River Gas Company	GR-82-235
Citizens Electric Company	ER-83-61
General Telephone Company of the Midwest	TR-83-164
Missouri Telephone Company	TR-83-334
Mobilpage Inc.	TR-83-350
Union Electric Company	ER-84-168
Missouri-American Water Company	WR-85-16
Great River Gas Company	GR-85-136
Grand River Mutual Telephone Company	TR-85-242
ALLTEL Missouri, Inc.	TR-86-14
Continental Telephone Company	TR-86-55
General Telephone Company of the Midwest	TC-87-57
St. Joseph Light & Power Company	GR-88-115
St. Joseph Light & Power Company	HR-88-116
Camelot Utilities, Inc.	WA-89-1
GTE North Incorporated	TR-89-182
The Empire District Electric Company	ER-90-138
Capital Utilities, Inc.	SA-90-224
St. Joseph Light & Power Company	EA-90-252
Kansas City Power & Light Company	EA-90-252
Sho-Me Power Corporation	ER-91-298
St. Joseph Light & Power Company	EC-92-214
St. Joseph Light & Power Company	ER-93-41
St. Joseph Light & Power Company	GR-93-42
Citizens Telephone Company	TR-93-268
The Empire District Electric Company	ER-94-174
Missouri-American Water Company	WR-95-205
Missouri-American Water Company	SR-95-206
Union Electric Company	EM-96-149
The Empire District Electric Company	ER-97-81
Missouri Gas Energy	GR-98-140
Laclede Gas Company	GR-98-374
Laclede Gas Company	GR-99-315
Atmos Energy Corporation	GM-2000-312
Ameren UE	GR-2000-512
Missouri Gas Energy	GR-2001-292
Laclede Gas Company	GT-2001-329
Laclede Gas Company	GR-2001-629

Missouri Gas Energy	GT-2003-0033
Aquila Networks – L&P	GT-2003-0038
Aquila Networks – MPS	GT-2003-0039
Southern Missouri Gas Company, L.P.	GT-2003-0031
Fidelity Natural Gas, Inc.	GT-2003-0036
Atmos Energy Corporation	GT-2003-0037
Laclede Gas Company	GT-2003-0032
Union Electric Company d/b/a Ameren UE	GT-2003-0034
Laclede Gas Company	GT-2003-0117
Aquila Networks MPS & L&P	GR-2004-0072
Missouri Gas Energy	GR-2004-0209
Missouri Pipeline Company & Missouri Gas Company	GC-2006-0491
Atmos Energy Corporation	GR-2006-0387
Laclede Gas Company	GR-2007-0208
Missouri Gas Utility Company	GR-2008-0060
TriGen-Kansas City Energy Group	HR-2008-0300
Laclede Gas Company	GT-2009-0056
Missouri Gas Energy	GR-2009-0355
Empire District Gas Company	GR-2009-0434
Laclede Gas Company	GR-2010-0171

## **Manisha Lakhanpal**

### **Present Position:** Regulatory Economist III

I joined Missouri Public Service Commission in August 2007 as a Regulatory Economist II in the Economic Analysis Section of the Energy Department, Operations Division.

### **Educational Background:**

In December 2005, I graduated with a Masters of Science in Applied Economics, specializing in Electricity, Natural Gas and Telecommunication, from Illinois State University, Normal, Illinois. I have a Post Graduate Diploma in Business Management from Chetana's Institute of Management and Research, Mumbai, India and an undergraduate degree in Political Science and History from University of Delhi, New Delhi, India.

### **Work Experience:**

I first joined Missouri Public Service Commission as an intern in 2006 (May 2006 - August 2006). Prior to returning to PSC I was employed by the Indiana Utility Regulatory Commission, Indianapolis, as a Utility Analyst (September 2006- August 2007). During my time in Indiana I worked on a variety of cases and projects, including a major rate case, wholesale power cost trackers for municipal utilities, environmental cost recovery cases, a certificate of need for the first wind power project in Indiana as well as a related case involving the purchase of output from the facility, and annual report to the legislature on the state of the industry in Indiana.

In the summer of 2005 (May 2005-July 2005), I worked as an Intern at Commonwealth Edison (ComEd), Chicago, on projects related to deregulation of electric markets in Illinois.

In India I have worked as an Operations Executive for an insurance company (June 2001 - December 2003).

## Case Proceeding Participation

Company	Case Number	Issue
Missouri Gas Utility	GR-2008-0060	Weather normal variables for weather normalization
Empire District Electric Company	ER-2008-0093	Weather normal variables for weather normalization, Revenue for Large Power and Large Transmission rate class
Trigen-Kansas City Energy Corporation-(Steam/Heat)	HR-2008-0300	Weather normal variables and weather normalization factors
Ameren UE	ER-2008-0318	Weather normal variables for weather normalization, Revenue for Large Power and Large Transmission rate class
Kansas City Power & Light Company	ER-2009-0089	Weather normal variables for weather normalization, Retail Rate Revenue
KCP&L GMO Company	ER-2009-0090	Weather normal variables for weather normalization
MGE (filed rebuttal and surrebuttal testimony)	GR-2009-0355	Weather normal variables for weather normalization
Ameren UE	ER-2010-0036	Weather normal variables for weather normalization, Revenue for Large Power and Large Transmission rate class
Empire Gas	GR-2009-0434	Weather normal variables for weather normalization
Empire District Electric Company	ER-2010-0130	Weather normal variables for weather normalization, Revenue for Large Power and Large Transmission rate class
Laclede Gas Company	GR-2010-0171	Weather normal variables for weather normalization

Publications: "Educational Attainment and AIDS Incidence: A Cross-Country Study", coauthored with Dr. Rati Ram, Department of Economics, Illinois State University, Economics of Education Review, 2008, vol. 27, issue 1, pages 14-21.



## **ZEPHANIA MAREVANGEPO**

### **Educational and Employment Background and Credentials**

I am currently employed as a Utility Regulatory Auditor II for the Missouri Public Service Commission (Commission). I accepted the position of Utility Regulatory Auditor I in December 2008.

I earned a Bachelor of Science degree in Business Administration with an emphasis in Accounting and Financial Services from Columbia College in July 2007. I earned a Masters in Business Administration with an emphasis in Accounting from Lincoln University in May 2009. My accounting and financial services degrees required an understanding of financial concepts, including the cost of capital.

I sponsored the Rate of Return section of the Cost of Service Report in the Laclede Gas Company rate case, Case Nos. GR-2010-0171; and Atmos Energy Corporation rate case, Case No. GR-2010-0192. I sponsored recommendations in two finance cases, Case Nos. EO-2009-0274 and GF-2009-0450. I have developed rate of return recommendations for numerous small water and sewer rate cases and have assisted as needed in small water and sewer certificate cases.

**CREDENTIALS AND BACKGROUND OF  
STEPHEN M. RACKERS**

I attended the University of Missouri in Columbia, Missouri, and received a Bachelor of Science degree in Business Administration, with a major in Accounting, in 1978. I have been employed by the Missouri Public Service Commission (Commission) since June 1, 1978 within the Auditing Department.

I passed the Uniform Certified Public Accountant examination and, I am licensed in the state of Missouri as a CPA. The Uniform CPA examination consisted of four parts: Accounting Practice, Accounting Theory, Auditing and Business Law.

I have been employed by this Commission as a Regulatory Auditor for over 30 years, and have submitted testimony on revenue, expense, and rate base ratemaking matters numerous times before the Commission. I have also been responsible for the supervision of other Commission employees in rate cases and other regulatory proceedings many times. I also participate in proceedings that involve the enforcement, interpretation and writing of the Commission's rules. I have received continuous training at in-house and outside seminars on technical ratemaking matters since I began my employment at the Commission. My responsibilities auditing the books and records of the utilities regulated by the Commission require that I review statutes applicable to the Commission or the utilities regulated by the Commission, the Commission's rules, utility tariffs, and contracts and other documents relating to the utilities regulated by the Commission. A listing of the cases in which I have previously filed testimony before this Commission, and the issues I have addressed in testimony in cases from 1997 to current, is attached as Schedule SMR 1.

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Interim Rates	ER-2010-0036	Direct, Rebuttal, Surrebuttal, True-Up	Union Electric Company d/b/a AmerenUE
Revenue Requirement Cost Of service Report, Taum Sauk Capacity Sales, Nuclear Plant Licensing	ER-2008-0318	Direct, Surrebuttal	Union Electric Company d/b/a AmerenUE
True-Up, Income Taxes, MGP Sites, Other Rates Base Items, Revenue Requirement and OPEB	GR-2007-0387	Direct, Rebuttal	ATMOS Energy Corporation
True-up, Security AAO, Joplin Surcharge	WR-2007-0216	Direct, Rebuttal, Supplemental True-up Direct	Missouri-American Water Company
Income Taxes, Accumulated Deferred Income Taxes in Rate Base, Taum Sauk Generating Plant, Pinckneyville and Kinmundy Generating Plants, Accumulated Income Deferred Income Tax Balance, Income Tax Expense	ER-2007-0002	Direct, Rebuttal, Surrebuttal	Union Electric Company d/b/a AmerenUE
Revenue-Requirement, True-up, Income Taxes, MGP Sites, Other Rate Base Items, OPEBs	GR-2006-0387	Direct, Rebuttal	ATMOS Energy Corporation
Affidavit in Support of the Stipulation and Agreement on various issues.	GR-2005-0284	Stipulation and Agreement	Laclede Gas Company
ISRS Income Taxes	GO-2004-0443	Direct	Laclede Gas Company
St. Joseph Treatment Plant, AAOs, Depreciation, Transaction Costs, Old St. Joseph Treatment Plant, Security Accounting Authority Order, Acquisition Adjustments	WC-2004-0168	Direct, Surrebuttal	Missouri-American Water Company
Security AAO, Recovery Of Undepreciated Plant Balances and Acquisition Adjustments	WR-2003-0500	Direct, Surrebuttal	Missouri-American Water Company
Transaction Costs, Depreciation, AAO's, Acquisition Adjustment, Security Accounting Authority Order, Old St. Joseph Treatment Plant	WR-2003-0500	Direct, Surrebuttal	Missouri-American Water Company
Financial Aspects	GT-2003-0117	Direct	Laclede Gas Company

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Copper Surveys, Net Salvage Expense, Environmental Cost, Test Year & True-Up, Accounting Authority Orders, Laclede Pipeline, Safety and Copper Service Replacement Program	GR-2002-356	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
Purchase Power	ER-2002-217	Direct	Citizens Electric Corporation
Income Taxes, Pension Liability	EC-2002-1025	Direct	Union Electric Company d/b/a AmerenUE
Pension Liability, Income Tax Expense, Deferred Income Taxes, Income Tax Expense, Deferred Income Taxes – Rate Base Offset, Pension Liability, Income Taxes, Territorial Agreements	EC-2002-1	Direct, Surrebuttal	Union Electric Company d/b/a AmerenUE
Incentive Compensation, Post-Retirement Benefits Other than Pensions, Prepaid Pension Assets, Pensions	GR-2001-629	Direct	Laclede Gas Company
Application Recommendation	GM-2001-342	Rebuttal	Laclede Gas Company
Merger Recommendation, Cost Allocation Manual	WM-2001-309	Rebuttal, Surrebuttal	Missouri-American Water Company, et al
Merger Cost and Savings, Infrastructure Replacement Deferrals, Income Taxes, Net Salvage Expense, Revenue Requirement, Merger Costs and Savings, Accounting Authority Orders (AAO's), Infrastructure Replacement, Depreciation	WR-2000-844	Direct, Rebuttal, Surrebuttal	St. Louis County Water Company
Pension Liability, AFUDC, Deferred OPEB Asset, Pension Expense – FAS 87, New St. Joseph Treatment Plant Phase-In, OPEBS – FAS 106, Phase-In, Accounting Authority Order, Phase-In	SR-2000-282	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	WR-2000-281	Direct in Support of Stipulation Agreement	Missouri-American Water Company
Pension Expense-FAS 87, Pension Liability, AFUDC, Deferred OPEB Asset, New St. Joseph Treatment Plant Phase-In, OPEBS-FAS 106, Accounting Authority Order, Phase-In, St. Joseph Treatment Plant	WR-2000-281	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	SR-2000-282	Direct in Support of Stipulation Agreement	Missouri-American Water Company
Territorial Agreements	EO-99-599	Rebuttal	Union Electric Company / Ozark Border Electric Cooperative
Safety Deferral, FAS 87, FAS 88, FAS 106, Prepaid Pension Asset, Environmental Cost, Computer Cost, Supplemental Pension, Accounting Authority Orders	GR-99-315	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
Main Replacement Program, Order-Infrastructure, Accounting Authority, Main Replacement Programs	WO-98-223	Direct	St. Louis County Water Company
Lease Classification & Terms	WA-97-46	Rebuttal	Missouri-American Water Company
Amortization of Depreciation Reserve Deficiency, Appointment Meter Reading, Main Incident Expense, Income Tax, Infrastructure Replacement Deferral, Property Tax	WR-97-382	Direct	St. Louis County Water Company
Lease Classification & Terms	WF-97-241	Rebuttal	Missouri-American Water Company
Income Tax, Territorial Agreement, Overview, Income Taxes, Alternative Regulation Plan and Agreements, Pension Liability	EM-96-149	Direct, Surrebuttal	Union Electric Company
Overview, Income Tax, Territorial Agreements, Alternative Regulation Plan and Agreement	EO-96-14	Direct, Surrebuttal	Union Electric Company

**HENRY E. WARREN, PHD**  
REGULATORY ECONOMIST  
UTILITY OPERATIONS DIVISION  
ENERGY DEPARTMENT

**EDUCATION AND EXPERIENCE**

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 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 rate cases of natural gas and electric utilities, tariff filings, applications, and various other matters relating to jurisdictional gas and electric utilities in Missouri, including review of Electric Resource Plans and Regulatory Plans for investor owned electric utilities in Missouri. I have also served on various task forces, collaboratives, and working groups dealing with issues relating to jurisdictional natural gas and electric utilities.

**MISSOURI PUBLIC SERVICE COMMISSION  
CASES IN WHICH PREPARED TESTIMONY,  
REPORT, OR REVIEW WAS SUBMITTED BY:  
HENRY E. WARREN, PHD**

<u>COMPANY NAME</u>	<u>CASE NUMBER</u>
St. Joseph Light and Power Company	GR-93-042 <sup>1</sup>
Laclede Gas Co.	GR-93-149
Missouri Public Service	GR-93-172 <sup>1</sup>
Western Resources	GR-93-240 <sup>1</sup>
Laclede Gas Co.	GR-94-220 <sup>1</sup>
Kansas City Power & Light Co.	EO-94-3601 <sup>2</sup>
United Cities Gas Co.	GR-95-160 <sup>1</sup>
UtiliCorp United, Inc.	EO-95-187 <sup>2</sup>
The Empire District Electric Co.	ER-95-279 <sup>1</sup>
The Empire District Electric Co.	EO-96-56 <sup>2</sup>
St. Joseph Light and Power Company	EO-96-198 <sup>2</sup>
Laclede Gas Co.	GR-96-193 <sup>1</sup>
Missouri Gas Energy	GR-96-285 <sup>1</sup>
The Empire District Electric Co.	ER-97-081 <sup>1</sup>
Union Electric Co.	GR-97-393 <sup>1</sup>
Missouri Gas Energy	GR-98-140 <sup>1</sup>
Laclede Gas Co.	GR-98-374 <sup>1</sup>
St. Joseph Light & Power Company	GR-99-246 <sup>1</sup>
Laclede Gas Co.	GR-99-315 <sup>1</sup>
Union Electric Company (d/b/a AmerenUE)	GR-2000-512 <sup>1</sup>
Missouri Gas Energy	GR-2001-292 <sup>1</sup>
Laclede Gas Co.	GR-2001-629 <sup>1</sup>

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<sup>1</sup>Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

<sup>2</sup>Staff Report or Review

**MISSOURI PUBLIC SERVICE COMMISSION**  
**CASES IN WHICH PREPARED TESTIMONY,**  
**REPORT OR REVIEW WAS SUBMITTED BY:**

**HENRY E. WARREN, PHD**  
**(CONTINUED)**

<u>COMPANY NAME</u>	<u>CASE NUMBER</u>
Laclede Gas Company	GC-2002-0110 <sup>2</sup>
Laclede Gas Company	GR-2002-0356 <sup>1</sup>
Aquila, Inc.	GC-2003-0131 <sup>2</sup>
Laclede Gas Company	GC-2003-0212 <sup>2</sup>
Laclede Gas Company	GT-2003-0117
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	GR-2004-0072 <sup>1</sup>
Missouri Gas Energy	GR-2004-0209
Laclede Gas Company	GC-2004-0240 <sup>2</sup>
Kansas City Power & Light Company	EO-2005-0329 <sup>2</sup>
Union Electric Company (d/b/a AmerenUE)	EO-2006-0240 <sup>2</sup>
The Empire District Electric Company	ER-2006-0315
The Atmos Energy Corporation	GR-2006-0387 <sup>1</sup>
Missouri Gas Energy	GR-2006-0422 <sup>1</sup>
Union Electric Company (d/b/a AmerenUE)	GR-2007-0003 <sup>1</sup>
Kansas City Power & Light Company	EO-2007-0008 <sup>2</sup>
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	EO-2007-0298 <sup>2</sup>
Laclede Gas Company	GR-2007-0208 <sup>2</sup>
Missouri Gas Energy – The Empire District Gas Company	GA-2007-0289, et al
Union Electric Company (d/b/a AmerenUE)	EO-2007-0409 <sup>2</sup>

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<sup>1</sup>Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

<sup>2</sup>Staff Report or Review



**MISSOURI PUBLIC SERVICE COMMISSION  
CASES IN WHICH PREPARED TESTIMONY,  
REPORT OR REVIEW WAS SUBMITTED BY:**

**HENRY E. WARREN, PHD  
(CONTINUED)**

The Empire District Electric Company	EO-2008-0069 <sup>2</sup>
Union Electric Company (d/b/a AmerenUE)	ER-2008-0318
Missouri Gas Energy	GR-2009-0355 <sup>1</sup>
The Empire District Gas Company	GR-2009-0434
The Empire District Electric Company	ER-2010-0130
Laclede Gas Company	GR-2010-0171 <sup>2</sup>

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<sup>1</sup>Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

<sup>2</sup>Staff Report or Review

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT  
COST OF SERVICE**

**APPENDIX 2  
Support for Staff Cost  
of  
Capital Recommendation**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

**AN ANALYSIS OF THE COST OF CAPITAL**

**FOR**

**ATMOS ENERGY CORPORATION  
MISSOURI JURISDICTION**

**CASE NO. GR-2010-0192**

**SCHEDULES**

**BY**

**ZEPHANIA MAREVANGEPO**

**UTILITY SERVICES DIVISION**

**MISSOURI PUBLIC SERVICE COMMISSION**

**MAY 2010**

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**List of Schedules**

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2-1	Federal Reserve Discount Rate Changes and Federal Reserve Funds Rate Changes
2-2	Graph of Federal Reserve Discount Rates and Federal Funds Rates
3-1	Rate of Inflation
3-2	Graph of Rate of Inflation
4-1	Average Yields on Mergent's Public Utility Bonds
4-2	Average Yields on Thirty-Year U.S. Treasury Bonds
4-3	Graph of Average Yields on Mergent's Public Utility Bonds and Thirty- Year U.S. Treasury Bonds
4-4	Graph of Monthly Spreads Between Yields on Mergent's Public Utility Bonds and Thirty-Year U.S. Treasury Bonds
4-5	Graph of Moody's Baa Corporate Bond Yields
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8	Embedded Cost of Long-Term Debt as of February 28, 2010 for Atmos Energy Corporation
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10	Seven Comparable Natural Gas Distribution Companies For Atmos Energy Corporation
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12	Five-Year Projected Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Comparable Natural Gas Distribution Utility Companies
13	Historical and Projected Growth Rates for the Seven Comparable Natural Gas Distribution Companies
14	Average High / Low Stock Price for February 2010 through April 2010 for the Seven Comparable Natural Gas Distribution Companies
15	DCF Estimated Costs of Common Equity for the Seven Comparable Natural Gas Distribution Companies
16	Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates for the Seven Comparable Natural Gas Distribution Companies
17	Selected Financial Ratios for the Seven Comparable Natural Gas Distribution Companies
18	Public Utility Revenue Requirement or Cost of Service
19	Weighted Cost of Capital for Atmos Energy Corporation - Missouri Jurisdiction

**ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192**

**Federal Reserve Discount Rate Changes and Federal Reserve Funds Rate Changes**

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
<u>01/01/83</u>	8.50%		<u>06/30/99</u>	4.50%	5.00%
<u>12/31/83</u>	8.50%		<u>08/24/99</u>	4.75%	5.25%
<u>04/09/84</u>	9.00%		<u>11/16/99</u>	5.00%	5.50%
<u>11/21/84</u>	8.50%		<u>02/02/00</u>	5.25%	5.75%
<u>12/24/84</u>	8.00%		<u>03/21/00</u>	5.50%	6.00%
<u>05/20/85</u>	7.50%		<u>05/19/00</u>	6.00%	6.50%
<u>03/07/86</u>	7.00%		<u>01/03/01</u>	5.75%	6.00%
<u>04/21/86</u>	6.50%		<u>01/04/01</u>	5.50%	6.00%
<u>07/11/86</u>	6.00%		<u>01/31/01</u>	5.00%	5.50%
<u>08/21/86</u>	5.50%		<u>03/20/01</u>	4.50%	5.00%
<u>09/04/87</u>	6.00%		<u>04/18/01</u>	4.00%	4.50%
<u>08/09/88</u>	6.50%		<u>05/15/01</u>	3.50%	4.00%
<u>02/24/89</u>	7.00%		<u>06/27/01</u>	3.25%	3.75%
<u>07/13/90</u>		8% *	<u>08/21/01</u>	3.00%	3.50%
<u>10/29/90</u>		7.75%	<u>09/17/01</u>	2.50%	3.00%
<u>11/13/90</u>		7.50%	<u>10/02/01</u>	2.00%	2.50%
<u>12/07/90</u>		7.25%	<u>11/06/01</u>	1.50%	2.00%
<u>12/18/90</u>		7.00%	<u>12/11/01</u>	1.25%	1.75%
<u>12/19/90</u>	6.50%		<u>11/06/02</u>	0.75%	1.25%
<u>01/09/91</u>		6.75%	<u>01/09/03</u>	2.25%**	1.25%
<u>02/01/91</u>	6.00%	6.25%	<u>06/25/03</u>	2.00%	1.00%
<u>03/08/91</u>		6.00%	<u>06/30/04</u>	2.25%	1.25%
<u>04/30/91</u>	5.50%	5.75%	<u>08/10/04</u>	2.50%	1.50%
<u>08/06/91</u>		5.50%	<u>09/21/04</u>	2.75%	1.75%
<u>09/13/91</u>	5.00%	5.25%	<u>11/10/04</u>	3.00%	2.00%
<u>10/31/91</u>		5.00%	<u>12/14/04</u>	3.25%	2.25%
<u>11/06/91</u>	4.50%	4.75%	<u>02/02/05</u>	3.50%	2.50%
<u>12/06/91</u>		4.50%	<u>03/22/05</u>	3.75%	2.75%
<u>12/20/91</u>	3.50%	4.00%	<u>05/03/05</u>	4.00%	3.00%
<u>04/09/92</u>		3.75%	<u>06/30/05</u>	4.25%	3.25%
<u>07/02/92</u>	3.00%	3.25%	<u>08/09/05</u>	4.50%	3.50%
<u>09/04/92</u>		3.00%	<u>09/20/05</u>	4.75%	3.75%
<u>01/01/93</u>			<u>11/01/05</u>	5.00%	4.00%
<u>12/31/93</u>	No Changes	No Changes	<u>12/13/05</u>	5.25%	4.25%
<u>02/04/94</u>		3.25%	<u>01/31/06</u>	5.50%	4.50%
<u>03/22/94</u>		3.50%	<u>03/28/06</u>	5.75%	4.75%
<u>04/18/94</u>		3.75%	<u>05/10/06</u>	6.00%	5.00%
<u>05/17/94</u>	3.50%	4.25%	<u>06/29/06</u>	6.25%	5.25%
<u>08/16/94</u>	4.00%	4.75%	<u>08/17/07</u>	5.75%	5.25%
<u>11/15/94</u>	4.75%	5.50%	<u>09/18/07</u>	5.25%	4.75%
<u>02/01/95</u>	5.25%	6.00%	<u>10/31/07</u>	5.00%	4.50%
<u>07/06/95</u>		5.75%	<u>12/11/07</u>	4.75%	4.25%
<u>12/19/95</u>		5.50%	<u>01/22/08</u>	4.00%	3.50%
<u>01/31/96</u>	5.00%	5.25%	<u>01/30/08</u>	3.50%	3.00%
<u>03/25/97</u>		5.50%	<u>03/16/08</u>	3.25%	
<u>12/12/97</u>	5.00%		<u>03/18/08</u>	2.50%	2.25%
<u>01/09/98</u>	5.00%		<u>04/30/08</u>	2.25%	2.00%
<u>03/06/98</u>	5.00%		<u>10/08/08</u>	1.75%	1.50%
<u>09/29/98</u>		5.25%	<u>10/29/08</u>	1.25%	1.00%
<u>10/15/98</u>	4.75%	5.00%	<u>12/16/08</u>	0.50%	0.00-0.25%
<u>11/17/98</u>	4.50%	4.75%	<u>02/16/10</u>	0.75%	

\* Staff began tracking the Federal Funds Rate.

\*\*Revised discount window program begins. Reflects rate on primary credit. This revised discount window policy results in incomparability of the discount rates after January 9, 2003 to discount rates before January 9, 2003.

Source:

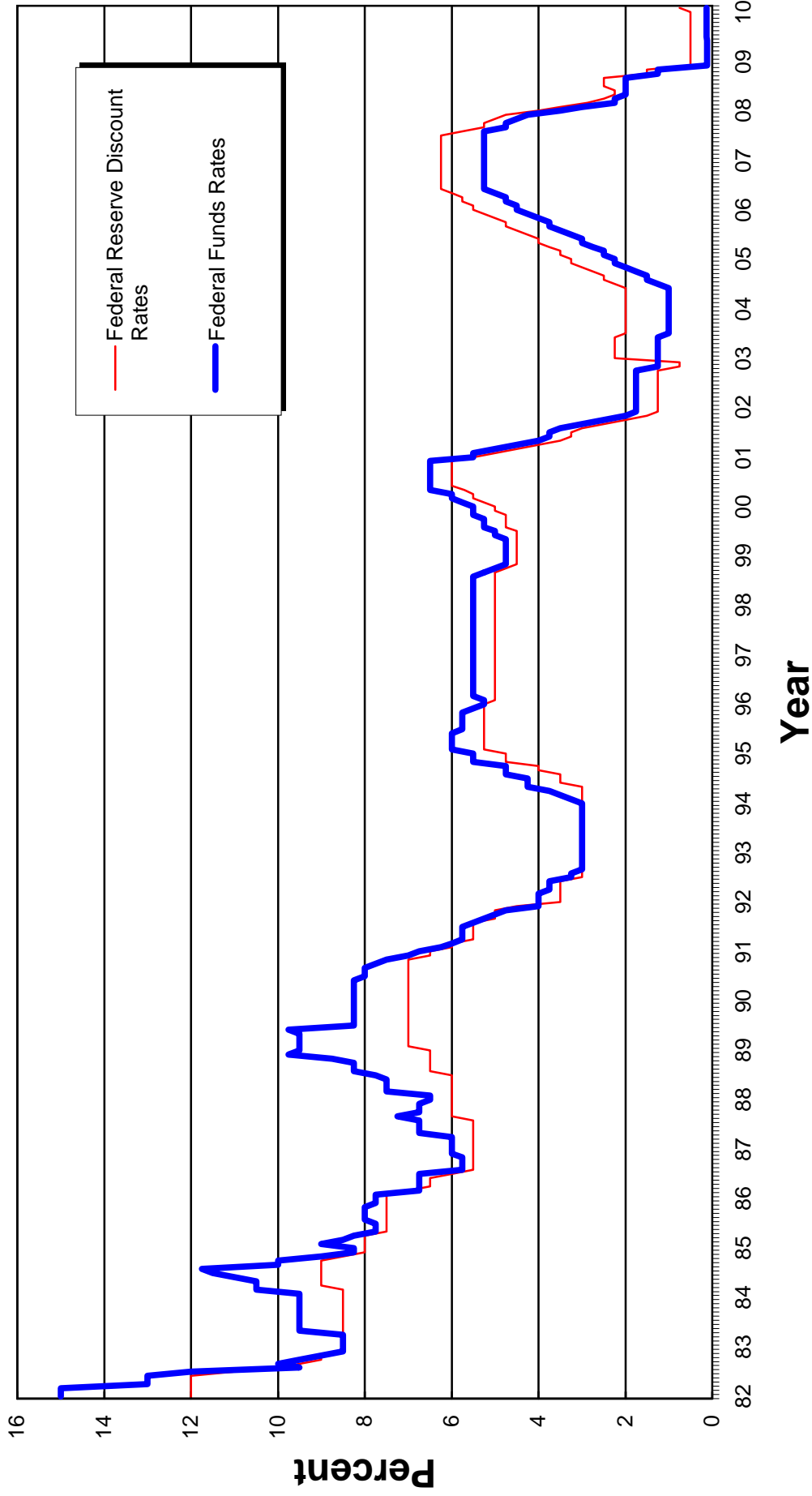
Federal Reserve Discount rate <http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

Federal Reserve Funds rate <http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

Note: Interest rates as of December 31 for each year are underlined.

# Federal Reserve Discount Rates and Federal Funds Rates

1982 - 2010



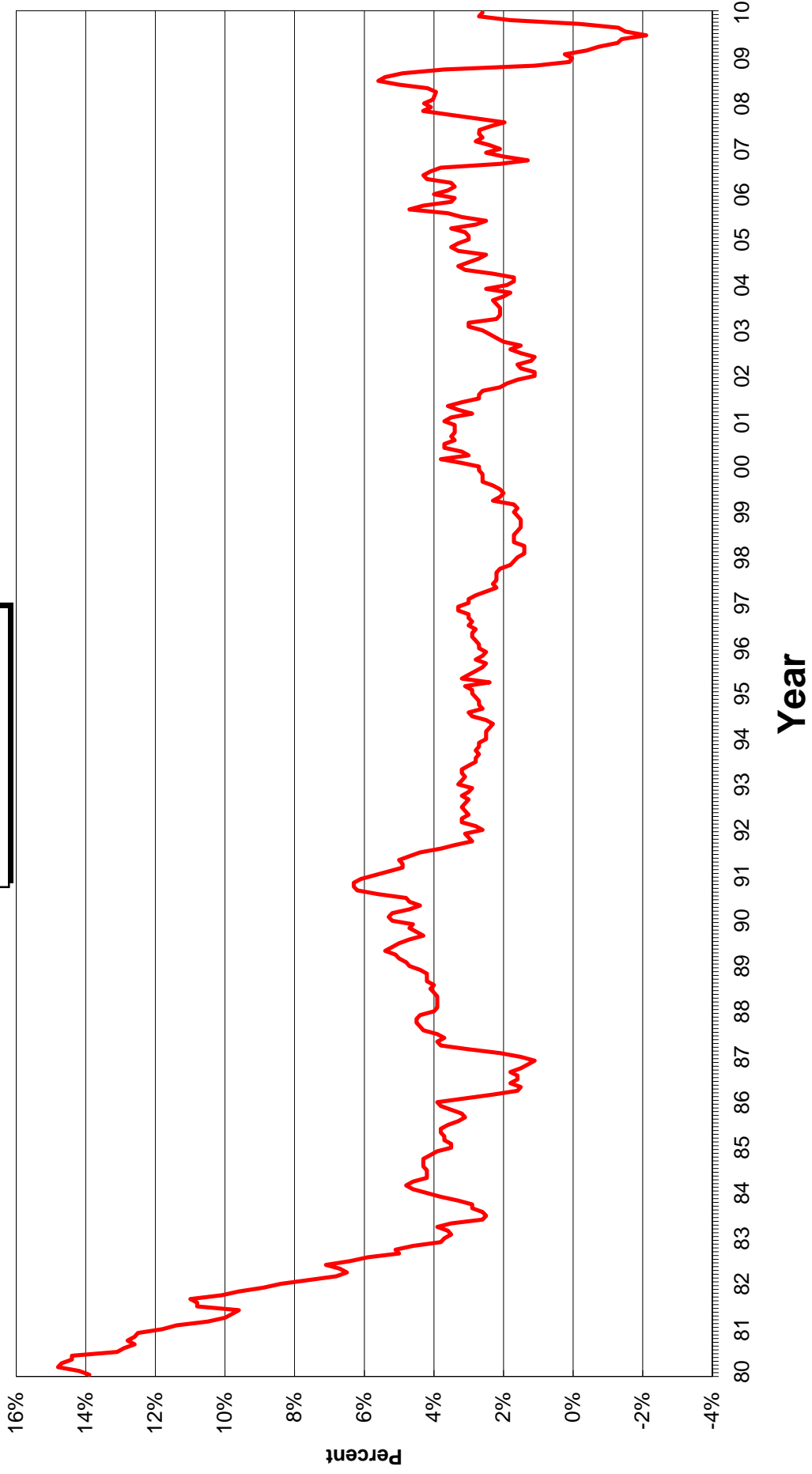
**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Rate of Inflation**

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	13.90	Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70	Jan 2000	2.70	Jan 2004	2.70	Jan 2008	1.90	Jan 2010	4.00	Jan 2010	4.00
Feb	14.20	Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70	Feb	2.70	Feb	3.20	Feb	1.70	Feb	3.60	Feb	4.30
Mar	14.80	Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80	Mar	2.80	Mar	3.70	Mar	1.70	Mar	3.70	Mar	4.00
Apr	14.70	Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90	Apr	2.90	Apr	3.00	Apr	3.30	Apr	3.00	Apr	3.90
May	14.40	May	4.20	May	3.90	May	3.00	May	2.90	May	2.90	May	3.20	May	3.10	May	3.20	May	4.20
Jun	14.40	Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80	Jun	2.80	Jun	3.70	Jun	3.30	Jun	3.30	Jun	5.00
Jul	13.10	Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00	Jul	3.00	Jul	3.70	Jul	3.00	Jul	3.00	Jul	5.60
Aug	12.90	Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90	Aug	2.90	Aug	3.40	Aug	2.70	Aug	2.70	Aug	5.40
Sep	12.60	Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00	Sep	3.00	Sep	3.50	Sep	2.50	Sep	3.50	Sep	4.90
Oct	12.80	Oct	4.30	Oct	4.20	Oct	4.20	Oct	3.20	Oct	3.00	Oct	3.40	Oct	2.50	Oct	3.30	Oct	3.70
Nov	12.60	Nov	4.10	Nov	4.20	Nov	4.20	Nov	3.00	Nov	3.30	Nov	3.40	Nov	3.50	Nov	3.50	Nov	1.10
Dec	12.50	Dec	3.90	Dec	4.40	Dec	4.40	Dec	2.90	Dec	3.30	Dec	3.40	Dec	3.30	Dec	3.30	Dec	0.10
Jan 1981	11.80	Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00	Jan 2001	3.00	Jan 2005	3.70	Jan 2009	3.00	Jan 2010	3.00	Jan 2010	0.00
Feb	11.40	Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00	Feb	3.00	Feb	3.50	Feb	3.00	Feb	3.00	Feb	0.20
Mar	10.50	Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80	Mar	2.80	Mar	2.90	Mar	3.10	Mar	3.10	Mar	-0.40
Apr	10.00	Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50	Apr	2.50	Apr	3.30	Apr	3.50	Apr	3.50	Apr	-0.70
May	9.80	May	3.80	May	5.40	May	5.40	May	3.20	May	2.20	May	3.60	May	2.80	May	2.80	May	-1.28
Jun	9.60	Jun	3.80	Jun	5.20	Jun	5.20	Jun	3.00	Jun	2.30	Jun	3.20	Jun	2.50	Jun	2.50	Jun	-1.40
Jul	10.80	Jul	3.60	Jul	5.00	Jul	5.00	Jul	2.80	Jul	2.20	Jul	2.70	Jul	3.20	Jul	3.20	Jul	-2.10
Aug	10.80	Aug	3.30	Aug	4.70	Aug	4.70	Aug	2.80	Aug	2.20	Aug	2.70	Aug	3.60	Aug	3.60	Aug	-1.50
Sep	11.00	Sep	3.10	Sep	4.30	Sep	4.30	Sep	2.70	Sep	2.20	Sep	2.60	Sep	4.70	Sep	4.70	Sep	-1.30
Oct	10.10	Oct	3.20	Oct	4.50	Oct	4.50	Oct	2.80	Oct	2.20	Oct	2.10	Oct	4.30	Oct	4.30	Oct	-0.20
Nov	9.60	Nov	3.50	Nov	4.70	Nov	4.70	Nov	2.70	Nov	1.80	Nov	1.90	Nov	3.50	Nov	3.50	Nov	1.80
Dec	8.90	Dec	3.80	Dec	4.60	Dec	4.60	Dec	2.70	Dec	1.70	Dec	1.60	Dec	3.40	Dec	3.40	Dec	2.70
Jan 1982	8.40	Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60	Jan 2002	1.60	Jan 2006	1.10	Jan 2010	4.00	Jan 2010	4.00	Jan 2010	2.60
Feb	7.60	Feb	3.10	Feb	5.30	Feb	5.30	Feb	2.50	Feb	1.40	Feb	1.10	Feb	3.60	Feb	3.60	Feb	2.10
Mar	6.80	Mar	2.30	Mar	5.20	Mar	5.20	Mar	2.50	Mar	1.40	Mar	1.50	Mar	3.40	Mar	3.40	Mar	2.30
Apr	6.50	Apr	1.60	Apr	4.70	Apr	4.70	Apr	2.40	Apr	1.40	Apr	1.60	Apr	3.50	Apr	3.50	Apr	
May	6.70	May	1.50	May	4.40	May	4.40	May	2.30	May	1.70	May	1.20	May	4.20	May	4.20	May	
Jun	7.10	Jun	1.80	Jun	4.70	Jun	4.70	Jun	2.50	Jun	1.70	Jun	1.10	Jun	4.30	Jun	4.30	Jun	
Jul	6.40	Jul	1.60	Jul	4.80	Jul	4.80	Jul	2.90	Jul	1.70	Jul	1.50	Jul	4.10	Jul	4.10	Jul	
Aug	5.90	Aug	1.60	Aug	5.60	Aug	5.60	Aug	3.00	Aug	1.60	Aug	1.80	Aug	3.80	Aug	3.80	Aug	
Sep	5.00	Sep	1.80	Sep	6.20	Sep	6.20	Sep	2.60	Sep	1.50	Sep	1.50	Sep	2.10	Sep	2.10	Sep	
Oct	5.10	Oct	1.50	Oct	6.30	Oct	6.30	Oct	2.70	Oct	1.50	Oct	2.00	Oct	1.30	Oct	1.30	Oct	
Nov	4.60	Nov	1.30	Nov	6.30	Nov	6.30	Nov	2.70	Nov	1.50	Nov	2.20	Nov	2.00	Nov	2.00	Nov	
Dec	3.80	Dec	1.10	Dec	6.10	Dec	6.10	Dec	2.80	Dec	1.60	Dec	2.40	Dec	2.50	Dec	2.50	Dec	
Jan 1983	3.70	Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70	Jan 2003	1.70	Jan 2007	2.60	Jan 2010	2.10	Jan 2010	2.10	Jan 2010	
Feb	3.50	Feb	2.10	Feb	5.30	Feb	5.30	Feb	2.90	Feb	1.60	Feb	3.00	Feb	2.40	Feb	2.40	Feb	
Mar	3.60	Mar	3.00	Mar	4.90	Mar	4.90	Mar	3.10	Mar	1.70	Mar	3.00	Mar	2.80	Mar	2.80	Mar	
Apr	3.90	Apr	3.80	Apr	4.90	Apr	4.90	Apr	2.40	Apr	2.30	Apr	2.20	Apr	2.60	Apr	2.60	Apr	
May	3.50	May	3.90	May	5.00	May	5.00	May	3.20	May	2.10	May	2.10	May	2.70	May	2.70	May	
Jun	2.60	Jun	3.70	Jun	4.70	Jun	4.70	Jun	3.00	Jun	2.00	Jun	2.10	Jun	2.70	Jun	2.70	Jun	
Jul	2.50	Jul	3.90	Jul	4.40	Jul	4.40	Jul	2.80	Jul	2.10	Jul	2.10	Jul	2.40	Jul	2.40	Jul	
Aug	2.60	Aug	4.30	Aug	3.80	Aug	3.80	Aug	2.60	Aug	2.60	Aug	2.30	Aug	2.00	Aug	2.00	Aug	
Sep	2.90	Sep	4.40	Sep	3.40	Sep	3.40	Sep	2.50	Sep	2.60	Sep	2.30	Sep	2.80	Sep	2.80	Sep	
Oct	2.90	Oct	4.50	Oct	2.90	Oct	2.90	Oct	2.80	Oct	2.60	Oct	2.00	Oct	3.50	Oct	3.50	Oct	
Nov	3.30	Nov	4.50	Nov	3.00	Nov	3.00	Nov	2.60	Nov	2.60	Nov	1.80	Nov	4.30	Nov	4.30	Nov	
Dec	3.80	Dec	4.40	Dec	3.10	Dec	3.10	Dec	2.50	Dec	2.70	Dec	1.90	Dec	4.10	Dec	4.10	Dec	

Source: U.S. Dept of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, Change for 12-Month Period, Bureau of Labor Statistics [http://www.bls.gov/schedule/archives/cpi\\_nr.htm](http://www.bls.gov/schedule/archives/cpi_nr.htm)

**Rate of Inflation**  
1980 - 2010





**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Average Yields on Mergent's Public Utility Bonds**

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	12.12	Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20	Jan 2000	8.22	Jan 2004	6.23	Jan 2008	6.08		
Feb	13.48	Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37	Feb	8.10	Feb	6.17	Feb	6.28		
Mar	14.33	Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72	Mar	8.14	Mar	6.01	Mar	6.29		
Apr	13.50	Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88	Apr	8.14	Apr	6.38	Apr	6.36		
May	12.17	May	14.95	May	10.75	May	8.72	May	7.99	May	8.55	May	6.68	May	6.38		
Jun	11.87	Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07	Jun	8.22	Jun	6.53	Jun	6.50		
Jul	12.12	Jul	14.92	Jul	10.96	Jul	8.46	Jul	8.02	Jul	8.17	Jul	6.34	Jul	6.50		
Aug	12.82	Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84	Aug	8.05	Aug	6.18	Aug	6.48		
Sep	13.29	Sep	14.04	Sep	10.56	Sep	8.32	Sep	8.01	Sep	8.16	Sep	6.01	Sep	6.59		
Oct	13.53	Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76	Oct	8.08	Oct	5.95	Oct	7.70		
Nov	14.07	Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48	Nov	8.03	Nov	5.97	Nov	7.80		
Dec	14.48	Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58	Dec	7.79	Dec	5.93	Dec	6.87		
Jan 1981	14.22	Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79	Jan 2001	7.76	Jan 2005	5.80	Jan 2009	6.77		
Feb	14.84	Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68	Feb	7.69	Feb	5.64	Feb	6.72		
Mar	14.86	Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92	Mar	7.59	Mar	5.86	Mar	6.85		
Apr	15.32	Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08	Apr	7.81	Apr	5.72	Apr	6.90		
May	15.84	May	12.89	May	9.92	May	7.78	May	7.94	May	7.88	May	5.60	May	6.83		
Jun	15.27	Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77	Jun	7.75	Jun	5.39	Jun	6.54		
Jul	15.87	Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52	Jul	7.71	Jul	5.50	Jul	6.15		
Aug	16.33	Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57	Aug	5.51	Aug	5.80		
Sep	16.89	Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50	Sep	7.73	Sep	5.54	Sep	5.60		
Oct	16.76	Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37	Oct	7.64	Oct	5.79	Oct	5.64		
Nov	15.50	Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24	Nov	7.61	Nov	5.88	Nov	5.71		
Dec	15.77	Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16	Dec	7.86	Dec	5.83	Dec	5.86		
Jan 1982	16.73	Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03	Jan 2002	7.69	Jan 2006	5.77	Jan 2010	5.83		
Feb	16.72	Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09	Feb	7.62	Feb	5.83	Feb	5.94		
Mar	16.07	Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13	Mar	7.83	Mar	5.98	Mar	5.90		
Apr	15.82	Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12	Apr	7.74	Apr	6.28	Apr			
May	15.60	May	9.52	May	9.89	May	8.32	May	7.11	May	7.76	May	6.39	May			
Jun	16.18	Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99	Jun	7.67	Jun	6.39	Jun			
Jul	16.04	Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99	Jul	7.54	Jul	6.37	Jul			
Aug	15.22	Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96	Aug	7.34	Aug	6.20	Aug			
Sep	14.56	Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88	Sep	7.23	Sep	6.03	Sep			
Oct	13.88	Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88	Oct	7.43	Oct	6.01	Oct			
Nov	13.58	Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96	Nov	7.31	Nov	5.82	Nov			
Dec	13.55	Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84	Dec	7.20	Dec	5.83	Dec			
Jan 1983	13.46	Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87	Jan 2003	7.13	Jan 2007	5.96	Jan 2010	5.83		
Feb	13.60	Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00	Feb	6.92	Feb	5.91	Feb			
Mar	13.28	Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18	Mar	6.80	Mar	5.87	Mar			
Apr	13.03	Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16	Apr	6.68	Apr	6.01	Apr			
May	13.00	May	9.82	May	9.29	May	7.93	May	7.42	May	6.35	May	6.03	May			
Jun	13.17	Jun	9.87	Jun	9.44	Jun	7.62	Jun	7.70	Jun	6.21	Jun	6.34	Jun			
Jul	13.28	Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66	Jul	6.54	Jul	6.28	Jul			
Aug	13.50	Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86	Aug	6.78	Aug	6.28	Aug			
Sep	13.35	Sep	11.00	Sep	9.03	Sep	7.82	Sep	7.87	Sep	6.58	Sep	6.24	Sep			
Oct	13.19	Oct	11.32	Oct	8.99	Oct	7.46	Oct	8.02	Oct	6.50	Oct	6.17	Oct			
Nov	13.33	Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86	Nov	6.44	Nov	6.04	Nov			
Dec	13.48	Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04	Dec	6.36	Dec	6.23	Dec			

Source: Mergent Bond Record for March 2009 PU Bonds (page 11)

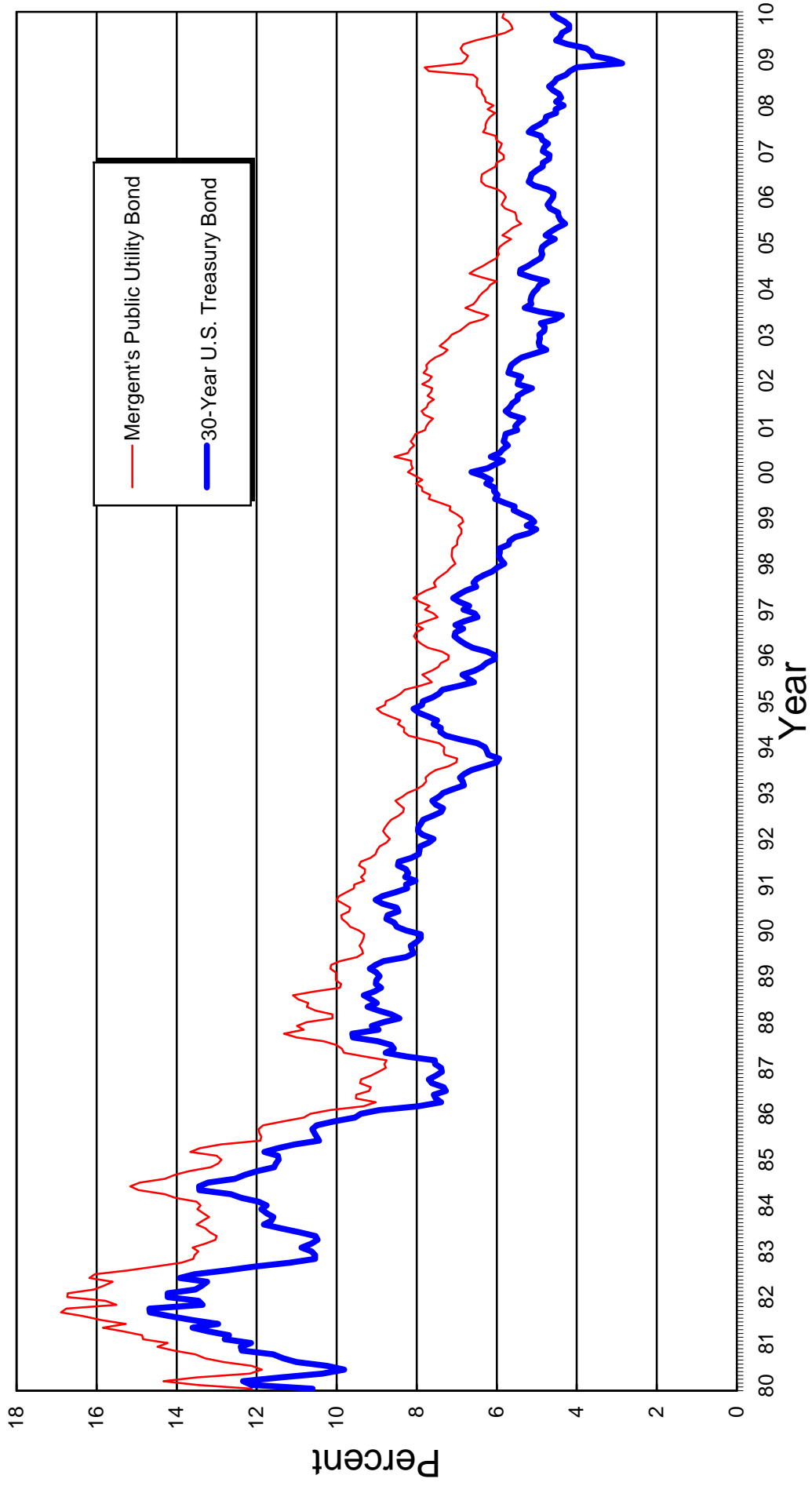
**ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192**

**Average Yields on Thirty-Year U.S. Treasury Bonds**

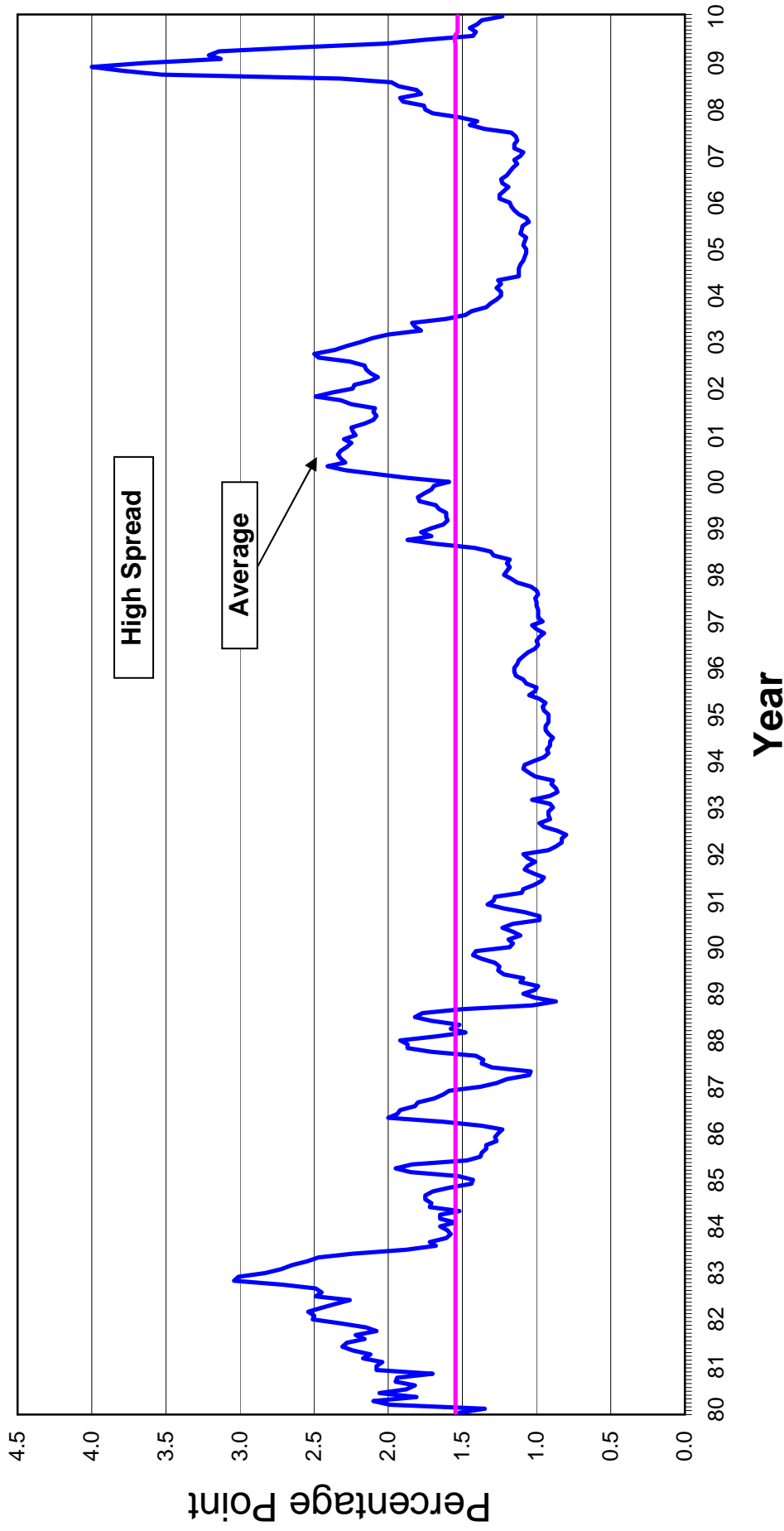
Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	10.60	Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05	Jan 2000	6.63	Jan 2004	4.99	Jan 2008	4.33				
Feb	12.13	Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24	Feb	6.23	Feb	4.93	Feb	4.52				
Mar	12.34	Mar	12.68	Mar	8.63	Mar	7.97	Mar	6.60	Mar	6.05	Mar	4.74	Mar	4.39				
Apr	11.40	Apr	12.35	Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85	Apr	5.14	Apr	4.44				
May	10.36	May	13.43	May	9.23	May	7.89	May	6.93	May	6.15	May	5.42	May	4.60				
Jun	9.81	Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06	Jun	5.93	Jun	5.41	Jun	4.69				
Jul	10.24	Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03	Jul	5.85	Jul	5.22	Jul	4.57				
Aug	11.00	Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84	Aug	5.72	Aug	5.06	Aug	4.50				
Sep	11.34	Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03	Sep	5.83	Sep	4.90	Sep	4.27				
Oct	11.59	Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81	Oct	5.80	Oct	4.86	Oct	4.17				
Nov	12.37	Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48	Nov	5.78	Nov	4.89	Nov	4.00				
Dec	12.40	Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55	Dec	5.49	Dec	4.86	Dec	2.87				
Jan 1981	12.14	Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83	Jan 2001	5.54	Jan 2005	4.73	Jan 2009	3.13				
Feb	12.80	Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69	Feb	5.45	Feb	4.55	Feb	3.59				
Mar	12.69	Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93	Mar	5.34	Mar	4.78	Mar	3.64				
Apr	13.20	Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09	Apr	5.65	Apr	4.65	Apr	3.76				
May	13.60	May	11.05	May	8.83	May	6.92	May	6.94	May	5.78	May	4.49	May	4.23				
Jun	12.96	Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77	Jun	5.67	Jun	4.29	Jun	4.52				
Jul	13.59	Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51	Jul	5.61	Jul	4.41	Jul	4.41				
Aug	14.17	Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58	Aug	5.48	Aug	4.46	Aug	4.37				
Sep	14.67	Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50	Sep	5.48	Sep	4.47	Sep	4.19				
Oct	14.68	Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33	Oct	5.32	Oct	4.67	Oct	4.19				
Nov	13.35	Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11	Nov	5.12	Nov	4.73	Nov	4.31				
Dec	13.45	Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99	Dec	5.48	Dec	4.66	Dec	4.49				
Jan 1982	14.22	Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81	Jan 2002	5.44	Jan 2006	4.59	Jan 2010	4.60				
Feb	14.22	Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89	Feb	5.39	Feb	4.58	Feb	4.62				
Mar	13.53	Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95	Mar	5.71	Mar	4.73	Mar	4.64				
Apr	13.37	Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92	Apr	5.67	Apr	5.06	Apr	4.69				
May	13.24	May	7.52	May	8.73	May	7.41	May	5.93	May	5.64	May	5.20	May	4.64				
Jun	13.92	Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70	Jun	5.52	Jun	5.16	Jun	4.64				
Jul	13.55	Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68	Jul	5.38	Jul	5.13	Jul	4.64				
Aug	12.77	Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54	Aug	5.08	Aug	5.00	Aug	4.64				
Sep	12.07	Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20	Sep	4.76	Sep	4.85	Sep	4.69				
Oct	11.17	Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01	Oct	4.93	Oct	4.85	Oct	4.69				
Nov	10.54	Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25	Nov	4.95	Nov	4.69	Nov	4.69				
Dec	10.54	Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06	Dec	4.92	Dec	4.68	Dec	4.69				
Jan 1983	10.63	Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16	Jan 2003	4.94	Jan 2007	4.85	Jan 2011	4.60				
Feb	10.88	Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37	Feb	4.81	Feb	4.82	Feb	4.60				
Mar	10.63	Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58	Mar	4.80	Mar	4.72	Mar	4.60				
Apr	10.48	Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55	Apr	4.90	Apr	4.86	Apr	4.60				
May	10.53	May	8.78	May	8.27	May	6.95	May	5.81	May	4.53	May	4.90	May	4.60				
Jun	10.93	Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04	Jun	4.37	Jun	5.20	Jun	4.60				
Jul	11.40	Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98	Jul	4.93	Jul	5.11	Jul	4.60				
Aug	11.82	Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07	Aug	5.30	Aug	4.93	Aug	4.60				
Sep	11.63	Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07	Sep	5.14	Sep	4.79	Sep	4.60				
Oct	11.58	Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26	Oct	5.16	Oct	4.77	Oct	4.60				
Nov	11.75	Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15	Nov	5.13	Nov	4.52	Nov	4.60				
Dec	11.88	Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35	Dec	5.08	Dec	4.53	Dec	4.60				

Sources:  
<http://finance.yahoo.com/q/hp?s=^TYX>  
<http://research.stlouisfed.org/fred2/data/GS30.txt>

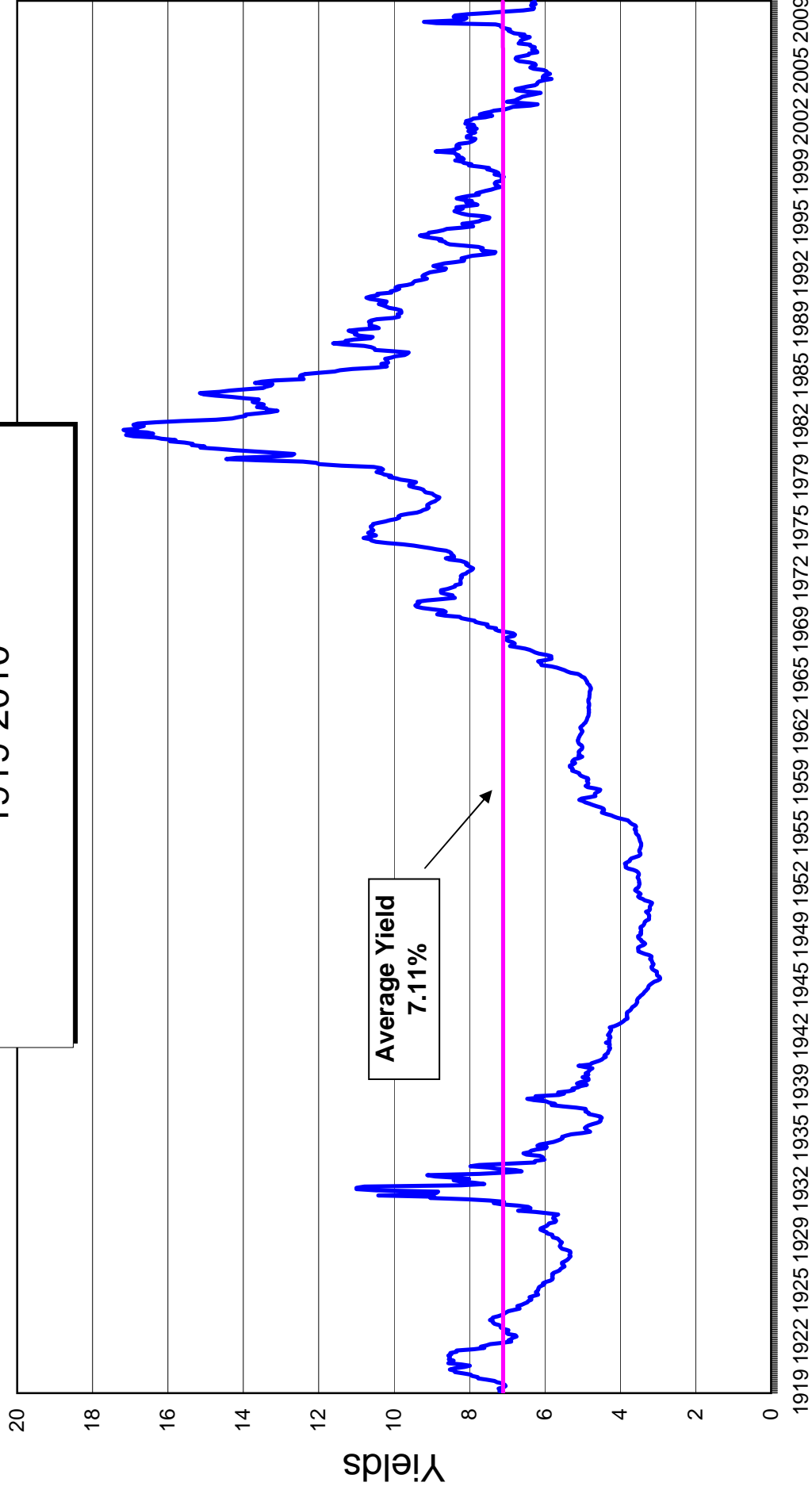
Average Yields on Mergent's Public Utility Bonds and  
Thirty-Year U.S. Treasury Bonds (1980 - 2010)



Monthly Spreads Between Yields on Mergent's Public Utility Bonds  
and  
Thirty-Year U.S. Treasury Bonds (1980 - 2010)



Moody's Baa Corporate Bond Yields  
1919-2010



Year

## Historical Capital Structures for Atmos Energy Corporation Consolidated Basis

Capital Components	2005	2006	2007	2008	2009
Common Equity	\$1,602,422	\$1,648,098	\$1,965,754	\$2,052,492	\$2,176,761
Long-Term Debt	\$2,183,104 <sup>1</sup>	\$2,180,362 <sup>1</sup>	\$2,126,315 <sup>1</sup>	\$2,119,792 <sup>1</sup>	\$2,169,400 <sup>1</sup>
Short-Term Debt	\$148,073 <sup>2</sup>	\$385,602 <sup>2</sup>	\$154,430 <sup>2</sup>	\$351,327 <sup>2</sup>	\$72,681 <sup>2</sup>
<b>Total</b>	<b>\$3,933,599</b>	<b>\$4,214,062</b>	<b>\$4,246,499</b>	<b>\$4,523,611</b>	<b>\$4,418,842</b>

Capital Structure	2005	2006	2007	2008	2009	5-Year Average
Common Equity	40.74%	39.11%	46.29%	45.37%	49.26%	44.15%
Long-Term Debt	55.50%	51.74%	50.07%	46.86%	49.09%	50.65%
Short-Term Debt	3.76%	9.15%	3.64%	7.77%	1.64%	5.19%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Notes: 1. Long-term debt excludes current maturities

2. Short-term debt includes current maturities of long-term debt

Source: Form 10-K SEC Filings (Fiscal year ended September 30, 2009)

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Selected Financial Ratios for Atmos Energy Corporation**

Financial Ratios	2005	2006	2007	2008	2009
Return on Common Equity	8.50%	9.80%	8.70%	8.80%	8.30%
Earnings Per Common Share	\$1.72	\$2.00	\$1.94	\$2.00	\$1.97
Cash Dividends Per Common Share	\$1.24	\$1.26	\$1.28	\$1.30	\$1.32
Common Dividend Payout Ratio	72.09%	63.00%	65.98%	65.00%	67.01%
Year-End Market Price Per Common Share	\$28.25	\$28.55	\$28.32	\$26.62	\$28.18
Year-End Book Value Per Common Share	\$19.90	\$20.16	\$22.01	\$22.60	\$23.52
Year-End Market-to-Book Ratio	1.42 x	1.42 x	1.29 x	1.18 x	1.20 x
Funds From Operations (FFO) Interest Coverage Ratio	2.6 x	3.9 x	3.8 x	4.2 x	3.9 x
FFO/Average Total Debt	10.9%	19.0%	20.0%	22.0%	21.4%
Corporate Credit Rating (Standard & Poor's Corporation)	A	A	A	A	A

Formulas:

Common Dividend Payout Ratio = Common Dividends Paid / Earnings Per Common Share.

Year-End Market-to-Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

Sources: Standard and Poor's Laclede Group Inc. Research Update March 31, 2010.  
 Value Line Investment Survey for Laclede Group, September 30, 2009.  
<http://finance.yahoo.com>

ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192

**Capital Structure as of February 28, 2010**  
**Atmos Energy**

<b>Capital Component</b>	(1) <b>Dollar Amount</b>	(2) <b>Percentage of Capital</b>
Common Stock Equity	\$ 2,317,944,778	50.97%
Long-Term Debt	\$ 2,159,855,937 <sup>1</sup>	47.50%
Short-Term Debt	\$ 69,737,186 <sup>2</sup>	1.53%
<b>Total Capitalization</b>	<b>\$ 4,547,537,901</b>	<b>100.00%</b>

Notes:

1. Long-term Debt at February 28, 2010 is based on the net balance of long-term debt, including current maturities (total principal amount of long-term debt outstanding less unamortized expenses and discounts)

2. Short-term balance (12 month Average for short-term balance **minus** 12-month Average for CWIP balance -- from February 2009 - Jan 2010) Ref: Data Request No. 119

Source:

Response to Staff's Data Request No. 121



ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192

**Embedded Cost of Long-Term Debt  
as of February 28, 2010**

	Amount Outstanding	Annual Cost
10.000% Kingdom 10.00% Due 12/31/11	\$1,151,654	\$115,165
10.000% Fredericks 10.00% Due 12/31/11	\$1,151,654	\$115,165
6.670% MTN 1995-1 6.67% Due 12/15/25	\$10,000,000	\$667,000
6.270% MTN 1995-2 6.27% Due 12/19/10	\$10,000,000	\$627,000
6.750% Debentures 6.75% Due 07/15/28	\$150,000,000	\$10,125,000
7.375% Sr Note 7.375% Due 05/15/11	\$350,000,000	\$25,812,500
5.125% Sr Note 5.125% Due 01/15/13	\$250,000,000	\$12,812,500
4.950% Sr Note 4.95% Due 10/15/2014	\$500,000,000	\$24,750,000
5.950% Sr Note 5.95% Due 10/15/2034	\$200,000,000	\$11,900,000
6.350% Sr Note 6.35% Due 06/15/2017	\$250,000,000	\$15,875,000
8.500% Sr Note 8.50% Due 03/15/2019	\$450,000,000	\$38,250,000
7.900% Columbus IDB VR Due 07/01/13	\$458,332	\$36,208
Unamortized Premium, Discount and Expense	-\$12,905,703	
Annual Amortization		\$6,259,930
Total	\$2,159,855,937	\$147,345,469
Embedded Cost of Long-term Debt		6.82%

Source: Response to Staff's Data Request No. 121

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Criteria for Selecting Comparable Natural Gas Distribution Companies**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural Gas Distribution Companies	Stock Publicly Traded	Information Printed In Value Line	10-Year Value Line Historical Growth Available	No Reduced Dividend since 2007	Projected Growth Available from Value Line and Reuters	At Least Investment Grade Credit Rating	Comparable Company Met All Criteria
<b>AGL Resources, Inc.</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Atmos Energy Corporation</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Delta Natural Gas Company, Inc.	Yes	Yes	Yes	Yes	No		
Energy West	Yes	Yes	Yes	No			
Laclede Group	Yes	Yes	Yes	Yes	No		
<b>New Jersey Resources Corp.</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Northwest Natural Gas Company</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Piedmont Natural Gas Company, Inc.</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RGC Resources, Inc.	Yes	Yes	Yes	Yes	No		
<b>South Jersey Industries, Inc.</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>WGL Holdings, Inc.</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sources: Column 1 = Edward Jones' Natural Gas Industry Summary, March 31, 2010.  
Columns 2, 3, 4, and 5 = The Value Line Investment Survey: Ratings & Reports, March 12, 2010.  
Column 6 = Reuters Estimates, April 22, 2010  
Column 7 = Standard & Poor's RatingsDirect

**ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192**

**Seven Comparable Natural Gas Distribution Companies  
For Atmos Energy Corporation**

<b>Number</b>	<b>Ticker Symbol</b>	<b>Company Name</b>
1	AGL	AGL Resources, Inc.
2	ATO	Atmos Energy Corporation.
3	NJR	New Jersey Resources Corporation
4	NWN	Northwest Natural Gas
5	PNY	Piedmont Natural Gas Company, Inc.
6	SJI	South Jersey Industries, Inc.
7	WGL	WGL Holdings, Inc.

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates**  
**for the Seven Comparable Natural Gas Distribution Companies**

Company Name	DPS	EPS	BVPS	Average of 10 Year Annual Compound Growth Rates
AGL Resources, Inc.	4.00%	7.00%	7.00%	6.00%
Atmos Energy Corporation	2.00%	4.00%	7.00%	4.33%
New Jersey Resources Corp.	4.50%	8.00%	8.50%	7.00%
Northwest Natural Gas Co.	2.00%	5.00%	3.50%	3.50%
Piedmont Natural Gas Co.	5.00%	5.00%	5.00%	5.00%
South Jersey Industries, Inc.	3.50%	11.50%	9.00%	8.00%
WGL Holdings, Inc.	<u>1.50%</u>	<u>4.00%</u>	<u>4.00%</u>	<u>3.17%</u>
<b>Average</b>	<b><u>3.21%</u></b>	<b><u>6.36%</u></b>	<b><u>6.29%</u></b>	<b><u>5.29%</u></b>
Standard Deviation	1.28%	2.52%	2.00%	1.67%

Source: The Value Line Investment Survey: Ratings & Reports, March 12, 2010.

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates**  
**for the Seven Comparable Natural Gas Distribution Companies**

Company Name	DPS	EPS	BVPS	Average of 5 Year Annual Compound Growth Rates
AGL Resources, Inc.	8.00%	8.50%	10.00%	8.83%
Atmos Energy Corp.	1.50%	4.50%	7.00%	4.33%
New Jersey Resources Corp.	6.00%	7.50%	10.50%	8.00%
Northwest Natural Gas Co.	3.00%	8.00%	3.50%	4.83%
Piedmont Natural Gas Co.	4.50%	6.50%	4.50%	5.17%
South Jersey Industries, Inc.	6.00%	13.00%	11.00%	10.00%
WGL Holdings, Inc.	2.00%	5.50%	5.00%	4.17%
<b>Average</b>	<u><u>4.43%</u></u>	<u><u>7.64%</u></u>	<u><u>7.36%</u></u>	<u><u>6.48%</u></u>
Standard Deviation	2.21%	2.55%	2.90%	2.22%

Source: The Value Line Investment Survey: Ratings & Reports, March 12, 2010.

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Average of Ten and Five-Year Dividends Per Share, Earnings Per Share  
& Book Value Per Share Growth Rates for the Seven Comparable Natural Gas Distribution  
Companies**

Company Name	10-Year Average DPS, EPS & BVPS	5-Year Average DPS, EPS & BVPS	Average of 5-Year & 10-Year Averages
AGL Resources, Inc.	6.00%	8.83%	7.42%
Atmos Energy Corp.	4.33%	4.33%	4.33%
New Jersey Resources Corporation	7.00%	8.00%	7.50%
Northwest Natural Gas	3.50%	4.83%	4.17%
Piedmont Natural Gas Company, Inc.	5.00%	5.17%	5.08%
South Jersey Industries, Inc.	8.00%	10.00%	9.00%
WGL Holdings, Inc.	<u>3.17%</u>	<u>4.17%</u>	<u>3.67%</u>
<b>Average</b>	<b><u>5.29%</u></b>	<b><u>6.48%</u></b>	<b><u>5.88%</u></b>

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Five-Year Projected Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates  
for the Seven Comparable Natural Gas Distribution Utility Companies**

<u>Company Name</u>	<u>DPS</u>	<u>EPS</u>	<u>BVPS</u>	<u>Average of 5 Year Annual Compound Growth Rates</u>
AGL Resources, Inc.	2.50%	3.50%	5.00%	3.67%
Atmos Energy Corp.	2.00%	5.50%	3.50%	3.67%
New Jersey Resources Corporation	5.50%	6.50%	4.50%	5.50%
Northwest Natural Gas	6.00%	5.00%	5.00%	5.33%
Piedmont Natural Gas Company, Inc.	3.50%	4.00%	3.00%	3.50%
South Jersey Industries, Inc.	6.50%	5.50%	5.00%	5.67%
WGL Holdings, Inc.	3.00%	2.50%	4.00%	3.17%
<b>Average</b>	<b>4.14%</b>	<b>4.64%</b>	<b>4.29%</b>	<b>4.36%</b>
Standard Deviation	1.68%	1.27%	0.75%	1.01%

Source: The Value Line Investment Survey: Ratings & Reports, March 12, 2010.

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Historical and Projected Growth Rates for the  
Seven Comparable Natural Gas Distribution Companies**

Company Name	(1)	(2)	(3)	(4)
	Historical Growth Rate (DPS, EPS and BVPS)	Projected Growth Rate (DPS, EPS and BVPS)	Projected 5-Year EPS Growth Reuters (Mean)	Projected 3-5 Year EPS Growth Value Line
AGL Resources, Inc.	7.42%	3.67%	6.17%	3.50%
Atmos Energy Corp.	4.33%	3.67%	4.40%	5.50%
New Jersey Resources Corporation	7.50%	5.50%	5.05%	6.50%
Northwest Natural Gas	4.17%	5.33%	4.50%	5.00%
Piedmont Natural Gas Company, Inc.	5.08%	3.50%	5.80%	4.00%
South Jersey Industries, Inc.	9.00%	5.67%	7.00%	5.50%
WGL Holdings, Inc.	<u>3.67%</u>	<u>3.17%</u>	<u>3.05%</u>	<u>2.50%</u>
	<u><b>5.88%</b></u>	<u><b>4.36%</b></u>	<u><b>5.14%</b></u>	<u><b>4.64%</b></u>

**Proposed Range of Growth: 4.75% - 5.75%**

Sources: Column 1 = Average of 10-Year and 5-Year Annual Compound Growth Rates from Schedule 11-3.

Column 2 = Schedule 12.

Column 3 = Reuters Website, May 25, 2010

Column 4 = The Value Line Investment Survey: Ratings and Reports, March 12, 2010.



**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Average High / Low Stock Price for February 2010 through April 2010  
for the Seven Comparable Natural Gas Distribution Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-- February 2010 --		-- March 2010 --		-- April 2010 --		
Company Name	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	Average High/Low Stock Price (02/10 - 04/10)
AGL Resources, Inc.	\$36.860	\$34.260	\$38.830	\$36.330	\$40.000	\$37.720	\$37.333
Atmos Energy Corp.	\$28.190	\$26.330	\$29.240	\$27.480	\$30.150	\$28.710	\$28.350
New Jersey Resources Corp.	\$37.040	\$33.490	\$38.170	\$36.430	\$39.010	\$36.950	\$36.848
Northwest Natural Gas Co.	\$44.840	\$41.050	\$47.540	\$44.230	\$49.180	\$46.070	\$45.485
Piedmont Natural Gas Co.	\$25.980	\$23.870	\$28.040	\$25.950	\$28.520	\$27.010	\$26.562
South Jersey Industries, Inc.	\$40.500	\$37.190	\$42.500	\$39.630	\$46.000	\$41.980	\$41.300
WGL Holdings, Inc.	\$33.340	\$31.000	\$35.020	\$33.120	\$36.120	\$34.330	\$33.822

Notes:

Column 7 = [ ( Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 ) / 6 ].

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Seven Comparable Natural Gas Distribution Companies,**

Company Name	(1) Expected Annual Dividend	(2) Average High/Low Stock Price	(3) Projected Dividend Yield
AGL Resources, Inc.	\$1.78	\$37.333	4.77%
Atmos Energy Corp.	\$1.35	\$28.350	4.76%
New Jersey Resources Corp.	\$1.41	\$36.848	3.81%
Northwest Natural Gas Co.	\$1.73	\$45.485	3.80%
Piedmont Natural Gas Co.	\$1.13	\$26.562	4.25%
South Jersey Industries, Inc.	\$1.37	\$41.300	3.32%
WGL Holdings, Inc.	\$1.53	\$33.822	4.52%
<b>Average</b>			<b><u>4.18%</u></b>

<b>Proposed Dividend Yield:</b>	<b>4.20%</b>
<b>Proposed Range of Growth:</b>	<b><u>4.75% - 5.75%</u></b>
<b>Estimated Proxy Cost of Common Equity</b>	<b>8.95%-9.95%</b>
<b>Recommended Cost of Common Equity</b>	<b>8.95%-9.95%</b>
<b>Midpoint</b>	<b>9.45%</b>

Notes: Column 1 = Estimated Dividends Declared per share based on 50% weight given to 2010 and 50% to 2011.

Column 3 = ( Column 1 / Column 2 ).

Sources: Column 1 = The Value Line Investment Survey: Ratings and Reports, March 12, 2010.

Column 2 = Schedule 14.



**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**

**Selected Financial Ratios for the Seven Comparable Natural Gas Distribution Companies**

Company Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	2009 Common Equity Ratio	2009 Long-Term Debt Ratio	Funds From Operations to Interest	Funds From Operations to Total Debt	Market- to-Book Value	2009 Return on Common Equity	2010 Projected Return on Common Equity	Bond Rating
AGL Resources, Inc.	48.00%	53.00%	5.12 x	20.86%	1.55 x	14.50%	12.00%	BBB+
Atmos Energy Corp.	50.10%	49.90%	3.91 x	21.36%	1.12 x	8.30%	9.00%	BBB+
New Jersey Resources Corp.	60.20%	39.80%	6.54 x	26.69%	2.08 x	14.60%	15.00%	A
Northwest Natural Gas Co.	52.30%	47.70%	4.45 x	22.21%	1.80 x	11.10%	11.00%	A+
Piedmont Natural Gas Co.	55.90%	44.10%	6.41 x	24.79%	1.98 x	13.20%	13.00%	A
South Jersey Industries, Inc.	63.50%	36.50%	5.70 x	21.82%	2.19 x	13.10%	13.50%	BBB+
WGL Holdings, Inc.	65.00%	33.30%	7.04 x	30.45%	1.46 x	11.60%	10.50%	AA-
<b>Average</b>	<b>56.43%</b>	<b>43.47%</b>	<b>4.83 x</b>	<b>22.1%</b>	<b>1.74 x</b>	<b>12.34%</b>	<b>12.00%</b>	<b>A</b>

Sources:

The Value Line Investment Survey Ratings & Reports, March 12, 2010: for columns (1), (2), (6) and (7).  
Standard & Poor's RatingsDirect for columns (3), (4) and (8).  
AUS Utility Reports, March 2010 for column (5).

**ATMOS ENERGY CORPORATION  
CASE NO. GR-2010-0192**

**Public Utility Revenue Requirement  
or  
Cost of Service**

The formula for the revenue requirement of a public utility may be stated as follows :

Equation 1 :                    **Revenue Requirement = Cost of Service**

or

Equation 2 :                     **$R R = O + ( V - D ) R$**

The symbols in the second equation are represented by the following factors :

$R R$	=	Revenue Requirement
$O$	=	Prudent Operating Costs, including Depreciation and Taxes
$V$	=	Gross Valuation of the Property Serving the Public
$D$	=	Accumulated Depreciation
$( V - D )$	=	Rate Base (Net Valuation)
$( V - D ) R$	=	Return Amount (\$\$) or Earnings Allowed on Rate Base
$R$	=	$i L + d P + k E$ or Overall Rate of Return (%)
$i$	=	Embedded Cost of Debt
$L$	=	Proportion of Debt in the Capital Structure
$d$	=	Embedded Cost of Preferred Stock
$P$	=	Proportion of Preferred Stock in the Capital Structure
$k$	=	Required Return on Common Equity (ROE)
$E$	=	Proportion of Common Equity in the Capital Structure

## Weighted Cost of Capital for Atmos Energy Corporation - Missouri Jurisdiction

<u>Capital Component</u>	<u>Percentage of Capital</u>	<u>Embedded Cost</u>	Weighted Cost of Capital Using Common Equity Return of:		
			<u>8.95%</u>	<u>9.45%</u>	<u>9.95%</u>
Common Stock Equity	50.97%	-----	4.56%	4.82%	5.07%
Long-Term Debt	47.50%	6.82%	3.24%	3.24%	3.24%
Short-Term Debt	<u>1.53%</u>	0.26%	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
	<u><b>100.00%</b></u>		<u><b>7.81%</b></u>	<u><b>8.06%</b></u>	<u><b>8.32%</b></u>

Source:

Average Short-term debt cost (Response to Staff's data request no. 122)

Notes:

See Schedule 7 for the Capital Structure Ratios.

See Schedule 8 for the Embedded Cost of Long-Term Debt.

## Attachment A

The DCF model is a market-oriented approach for deriving the cost of common equity. The cost of common equity calculated from the DCF model is inherently capable of attracting capital. This results from the theory that security prices adjust continually over time, so that an equilibrium price exists and the stock is neither undervalued nor overvalued. It can also be stated that stock prices continually fluctuate to reflect the required and expected return for the investor.

The constant-growth form of the DCF model was used in this analysis. This model relies upon the fact that a company's common stock price is dependent upon the expected cash dividends and upon cash flows received through capital gains or losses that result from stock price changes. The interest rate which discounts the sum of the future expected cash flows to the current market price of the common stock is the calculated cost of common equity. This can be expressed algebraically as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{\text{Discounted by } k} + \frac{\text{Expected Price in 1 year}}{\text{Discounted by } k} \quad (1)$$

where  $k$  equals the cost of equity. Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{(1 + k)} + \frac{\text{Present Price } (1+g)}{(1 + k)} \quad (2)$$

where  $g$  equals the growth rate and  $k$  equals the cost of equity. Letting the present price equal  $P_0$  and expected dividends equal  $D_1$ , the equation appears as:

$$P_0 = \frac{D_1}{(1 + k)} + \frac{P_0(1+g)}{(1 + k)} \quad (3)$$

The cost of equity equation may also be algebraically represented as:

$$k = \frac{D_1}{P_0} + g \quad (4)$$

Thus, the cost of common stock equity,  $k$ , is equal to the expected dividend yield ( $D_1/P_0$ ) plus the expected growth in dividends ( $g$ ) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The discounted cash flow method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

1. Market equilibrium;
2. Perpetual life of the company;
3. Constant payout ratio;
4. Payout of less than 100% earnings;
5. Constant price/earnings ratio;
6. Constant growth in cash dividends;
7. Stability in interest rates over time;
8. Stability in required rates of return over time; and,
9. Stability in earned returns over time.

Flowing from these, it is further assumed that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand-in-hand. Although the entire list of the above assumptions is rarely met, the DCF model is a reasonable working model describing an actual investor's expectations and resulting behaviors.



## Attachment B

The CAPM describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$k = R_f + \beta (R_m - R_f)$$

where:

- k = the expected return on equity for a specific security;
- $R_f$  = the risk-free rate;
- $\beta$  = beta; and
- $R_m - R_f$  = the market risk premium.

The first term of the CAPM is the risk-free rate ( $R_f$ ). The risk-free rate reflects the level of return that can be achieved without accepting any risk. In reality, there is no such risk-free asset, but it is generally represented by U.S. Treasury securities.

The second term of the CAPM is beta ( $\beta$ ). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. This causes a higher beta security to be less desirable to a risk-averse investor and therefore requires a higher return in order to attract investor capital away from a lower beta security.

The final term of the CAPM is the market risk premium ( $R_m - R_f$ ). The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment.

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**

**APPENDIX 3**  
**Weather Normal Variables**  
**Used for Weather Normalization**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

<b>STATION: KANSAS_CITY_WSMO_AP, MO (Station ID: 234358)</b> <b>Actual Heating Degree-Days (HDD) and Normal Heating Degree-Days (NHDD)</b> <b>For The 12 Calendar Months Beginning July 01, 2008 And Ending June 30, 2009</b>											
		TOTAL HDD BY MONTH						PEAK DAY HDD			
YEAR	MONTH	OBSERVED TOTALS HDD	NORMAL TOTALS NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL	ADJUSTMENT, ACTUAL TO NORMAL
2008	7	0	1	1	0.00	0.82	0.82	0.00	0.82	0.82	0.82
2008	8	0	2	2	0.00	1.73	1.73	0.00	1.73	1.73	1.73
2008	9	57	72	15	7.50	16.83	9.33	7.50	16.83	9.33	9.33
2009	10	313	282	(31)	27.00	28.57	1.57	27.00	28.57	1.57	1.57
2008	11	658	669	11	41.00	45.86	4.86	41.00	45.86	4.86	4.86
2008	12	1125	1047	(78)	60.00	66.63	6.63	60.00	66.63	6.63	6.63
2009	1	1163	1182	19	62.00	65.99	3.99	62.00	65.99	3.99	3.99
2009	2	791	905	114	47.00	62.57	15.57	47.00	62.57	15.57	15.57
2009	3	615	661	46	51.50	48.08	(3.42)	51.50	48.08	(3.42)	(3.42)
2009	4	382	340	(42)	31.00	31.17	0.16	31.00	31.17	0.16	0.16
2009	5	90	106	16	10.00	16.98	6.98	10.00	16.98	6.98	6.98
2009	6	5	8	3	4.50	5.66	1.16	4.50	5.66	1.16	1.16
<b>12 MONTHS</b>		<b>5197</b>	<b>5273</b>	<b>76</b>	<b>62.00</b>	<b>66.63</b>	<b>4.63</b>	<b>62.00</b>	<b>66.63</b>	<b>4.63</b>	<b>4.63</b>

**STATION: KIRKSVILLE, MO (Station ID: 234544)**  
**Actual Heating Degree-Days (HDD) and Normal Heating Degree-Days (NHDD)**  
**For The 12 Calendar Months Beginning July 01, 2008 And Ending June 30, 2009**

YEAR	MONTH	TOTAL HDD BY MONTH				PEAK DAY HDD			
		OBSERVED TOTALS HDD	NORMAL TOTALS NHDD	ADJUSTMENT, ACTUAL TO NORMAL		OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL	
2008	7	0	2	2		0.00	2.06	2.06	
2008	8	0	6	6		0.00	4.13	4.13	
2008	9	82	105	23		14.50	18.58	4.08	
2009	10	387	353	(34)		32.00	31.45	(0.55)	
2008	11	742	764	22		44.50	49.76	5.26	
2008	12	1259	1158	(101)		66.50	67.89	1.39	
2009	1	1392	1312	(80)		69.00	69.76	0.76	
2009	2	939	1037	98		54.50	66.59	12.09	
2009	3	743	787	44		45.00	51.27	6.27	
2009	4	501	445	(56)		33.00	35.77	2.77	
2009	5	151	160	9		17.00	20.29	3.29	
2009	6	12	19	7		5.00	8.53	3.53	
<b>12 MONTHS</b>		<b>6206</b>	<b>6148</b>	<b>(59)</b>		<b>69.00</b>	<b>69.76</b>	<b>0.76</b>	

<b>STATION: CAPE_GIRARDEAU_FAA_AIRP, MO (Station ID: 231289)</b> <b>Actual Heating Degree-Days (HDD) and Normal Heating Degree-Days (NHDD)</b> <b>For The 12 Calendar Months Beginning July 01, 2008 And Ending June 30, 2009</b>												
		TOTAL HDD BY MONTH					PEAK DAY HDD					
YEAR	MONTH	OBSERVED TOTALS HDD	NORMAL TOTALS NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL		
2008	7	0	0	0	0.00	0.10	0.10	0.00	0.10	0.10		
2008	8	0	1	1	0.00	0.72	0.72	0.00	0.72	0.72		
2008	9	11	45	35	5.00	12.92	7.92	5.00	12.92	7.92		
2009	10	262	239	(23)	25.50	24.88	(0.62)	25.50	24.88	(0.62)		
2008	11	641	548	(93)	38.50	38.20	(0.30)	38.50	38.20	(0.30)		
2008	12	902	883	(19)	49.50	55.68	6.18	49.50	55.68	6.18		
2009	1	1060	1009	(51)	55.50	60.17	4.67	55.50	60.17	4.67		
2009	2	701	761	60	46.50	53.46	6.96	46.50	53.46	6.96		
2009	3	446	546	100	38.00	40.68	2.68	38.00	40.68	2.68		
2009	4	284	257	(27)	25.50	26.84	1.34	25.50	26.84	1.34		
2009	5	60	65	5	9.50	20.07	10.57	9.50	20.07	10.57		
2009	6	1	3	2	1.00	2.88	1.88	1.00	2.88	1.88		
<b>12 MONTHS</b>		<b>4368</b>	<b>4358</b>	<b>(9)</b>	<b>55.50</b>	<b>60.17</b>	<b>4.67</b>	<b>55.50</b>	<b>60.17</b>	<b>4.67</b>		

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT  
COST OF SERVICE**

**APPENDIX 4  
Weather Normalization of Sales**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**  
**WEATHER & DAYS NORMALIZATION**

**ATMOS ENERGY CORPORATION**  
**CASE NO. GR-2010-0192**  
**WEATHER & DAYS NORMALIZATION**

SYSTEM: West		CLASS : Residential				
Billing Month	Normalized Sales per Customer					Normal Usage per Customer
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	5,297	113	5,410	3,400	1.5911	
Aug	9,480	25	9,506	3,352	2.8358	
Sep	4,229	-622	3,607	3,366	1.0716	
Oct	6,766	1,647	8,413	3,381	2.4883	
Nov	17,361	-253	17,107	3,423	4.9977	
Dec	39,127	-3,026	36,101	3,502	10.3086	
Jan	56,651	457	57,107	3,526	16.1960	
Feb	45,085	3,404	48,489	3,538	13.7052	
Mar	34,638	1,305	35,944	3,563	10.0880	
Apr	24,374	-1,371	23,003	3,535	6.5073	
May	10,538	898	11,435	3,444	3.3203	
Jun	3,953	482	4,434	3,381	1.3115	
	257,498	3,058	260,556	41,411	75.5034	
		1.19%				

SYSTEM: NE		CLASS : Residential				
Billing Month	Normalized Sales per Customer					Normal Usage per Customer
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	25,340	1,153	26,493	16,242	1.6312	
Aug	16,869	546	17,415	16,162	1.0775	
Sep	19,925	-3,759	16,166	16,157	1.0005	
Oct	30,850	11,779	42,630	16,177	2.6352	
Nov	87,493	-37	87,457	16,755	5.2197	
Dec	216,203	-18,905	197,298	16,940	11.6469	
Jan	284,930	-4,390	280,539	16,986	16.5159	
Feb	243,130	-435	242,695	17,046	14.2377	
Mar	196,324	3,897	200,221	17,131	11.6877	
Apr	123,913	-6,488	117,425	17,095	6.8690	
May	54,559	3,604	58,163	16,818	3.4584	
Jun	20,587	1,087	21,674	16,339	1.3265	
	1,320,124	-11,947	1,308,177	199,848	78.5503	
		-0.90%				

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	25	25
Sep	0	-622	-622
Oct	0	1,647	1,647
Nov	0	-253	-253
Dec	0	-3,026	-3,026
Jan	0	457	457
Feb	0	3,404	3,404
Mar	0	1,305	1,305
Apr	0	-1,371	-1,371
May	0	898	898
Jun	-59	540	482
	-59	3,116	3,058
	-0.02%	1.21%	1.19%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	546	546
Sep	0	-3,759	-3,759
Oct	0	11,779	11,779
Nov	0	-37	-37
Dec	0	-18,905	-18,905
Jan	0	-4,390	-4,390
Feb	0	-435	-435
Mar	0	3,897	3,897
Apr	0	-6,488	-6,488
May	0	3,604	3,604
Jun	-93	1,180	1,087
	-93	-11,854	-11,947
	-0.01%	-0.90%	-0.90%

**ATMOS ENERGY CORPORATION**  
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**ATMOS ENERGY CORPORATION**  
**Case No. GR-2010-0192**  
**WEATHER and DAYS NORMALIZATION**

<b>SYSTEM: SE</b>						<b>CLASS : Residential</b>					
<b>Normalized Sales per Customer</b>						<b>Normalized Sales per Customer</b>					
Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer
Jul	40,888	345	41,233	28,726	1.4354	Jul	71,525	1,611	73,136	48,368	1.5121
Aug	32,358	46	32,403	28,534	1.1356	Aug	58,707	617	59,324	48,048	1.2347
Sep	31,580	2,073	33,653	28,495	1.1810	Sep	55,735	-2,309	53,426	48,018	1.1126
Oct	42,765	13,919	56,684	28,657	1.9780	Oct	80,381	27,345	107,727	48,215	2.2343
Nov	122,278	-15,467	106,811	29,138	3.6657	Nov	227,132	-15,757	211,375	49,316	4.2861
Dec	313,415	-46,809	266,606	29,588	9.0106	Dec	568,746	-68,740	500,005	50,030	9.9941
Jan	381,620	19,995	401,616	29,734	13.5070	Jan	723,201	16,062	739,262	50,246	14.7129
Feb	344,170	-7,912	336,258	29,789	11.2880	Feb	632,385	-4,942	627,443	50,373	12.4559
Mar	280,225	17,252	297,477	30,074	9.8915	Mar	511,187	22,455	533,642	50,768	10.5114
Apr	147,846	7,417	155,263	30,084	5.1610	Apr	296,133	-442	295,691	50,714	5.8306
May	75,263	4,708	79,971	29,304	2.7290	May	140,359	9,210	149,569	49,566	3.0176
Jun	32,032	960	32,992	28,818	1.1448	Jun	56,572	2,529	59,101	48,538	1.2176
	1,844,440	-3,473	1,840,967	350,941	62.9496		3,422,062	-12,362	3,409,700	49,350	69.0922
		-0.19%						-0.36%			

<b>SYSTEM: ALL</b>						<b>CLASS : Residential</b>					
<b>Normalized Sales per Customer</b>						<b>Normalized Sales per Customer</b>					
Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer
Jul	71,525	1,611	73,136	48,368	1.5121	Jul	71,525	1,611	73,136	48,368	1.5121
Aug	58,707	617	59,324	48,048	1.2347	Aug	58,707	617	59,324	48,048	1.2347
Sep	55,735	-2,309	53,426	48,018	1.1126	Sep	55,735	-2,309	53,426	48,018	1.1126
Oct	80,381	27,345	107,727	48,215	2.2343	Oct	80,381	27,345	107,727	48,215	2.2343
Nov	227,132	-15,757	211,375	49,316	4.2861	Nov	227,132	-15,757	211,375	49,316	4.2861
Dec	568,746	-68,740	500,005	50,030	9.9941	Dec	568,746	-68,740	500,005	50,030	9.9941
Jan	723,201	16,062	739,262	50,246	14.7129	Jan	723,201	16,062	739,262	50,246	14.7129
Feb	632,385	-4,942	627,443	50,373	12.4559	Feb	632,385	-4,942	627,443	50,373	12.4559
Mar	511,187	22,455	533,642	50,768	10.5114	Mar	511,187	22,455	533,642	50,768	10.5114
Apr	296,133	-442	295,691	50,714	5.8306	Apr	296,133	-442	295,691	50,714	5.8306
May	140,359	9,210	149,569	49,566	3.0176	May	140,359	9,210	149,569	49,566	3.0176
Jun	56,572	2,529	59,101	48,538	1.2176	Jun	56,572	2,529	59,101	48,538	1.2176
	3,422,062	-12,362	3,409,700	49,350	69.0922		3,422,062	-12,362	3,409,700	49,350	69.0922
		-0.36%						-0.36%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jul	0	345	345
Aug	0	46	46
Sep	0	2,073	2,073
Oct	0	13,919	13,919
Nov	0	-15,467	-15,467
Dec	0	-46,809	-46,809
Jan	0	19,995	19,995
Feb	0	-7,912	-7,912
Mar	0	17,252	17,252
Apr	0	7,417	7,417
May	0	4,708	4,708
Jun	-309	1,269	960
	-309	-3,164	-3,473
	-0.02%	-0.17%	-0.19%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jul	0	1,611	1,611
Aug	0	617	617
Sep	0	-2,309	-2,309
Oct	0	27,345	27,345
Nov	0	-15,757	-15,757
Dec	0	-68,740	-68,740
Jan	0	16,062	16,062
Feb	0	-4,942	-4,942
Mar	0	22,455	22,455
Apr	0	-442	-442
May	0	9,210	9,210
Jun	-460	2,989	2,529
	-460	-11,902	-12,362
	-0.01%	-0.35%	-0.36%



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**WEATHER & DAYS NORMALIZATION**

SYSTEM: West		CLASS : SGS				
Billing Month	Normalized Sales per Customer					Normal Usage per Customer
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers		
Jul	1,130	41	1,172	500		2,3435
Aug	959	8	967	499		1,9378
Sep	865	-174	691	487		1,4195
Oct	1,411	446	1,858	489		3,7991
Nov	3,803	-126	3,677	506		7,2673
Dec	11,006	-734	10,272	512		20,0628
Jan	16,138	-21	16,117	520		30,9951
Feb	13,395	1,011	14,406	525		27,4394
Mar	9,351	311	9,662	523		18,4737
Apr	5,674	-195	5,479	521		10,5157
May	2,316	189	2,505	509		4,9217
Jun	1,224	179	1,403	500		2,8065
	67,272	937	68,209	6,091		134,3802
		1.39%				

SYSTEM: NE		CLASS : SGS				
Billing Month	Normalized Sales per Customer					Normal Usage per Customer
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers		
Jul	6,602	297	6,899	2,063		3,3440
Aug	5,088	144	5,232	2,054		2,5473
Sep	5,729	-853	4,876	2,040		2,3900
Oct	7,645	2,692	10,337	2,037		5,0747
Nov	19,153	-36	19,116	2,116		9,0342
Dec	53,928	-4,749	49,179	2,131		23,0778
Jan	72,867	-1,180	71,686	2,121		33,7984
Feb	62,281	42	62,323	2,144		29,0684
Mar	48,075	1,303	49,378	2,134		23,1387
Apr	26,363	-1,795	24,568	2,127		11,5505
May	12,147	819	12,966	2,092		6,1980
Jun	5,741	9	5,751	2,047		2,8093
	325,618	-3,307	322,311	25,106		154,0559
		-1.02%				

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	8	8
Sep	0	-174	-174
Oct	0	446	446
Nov	0	-126	-126
Dec	0	-734	-734
Jan	0	-21	-21
Feb	0	1,011	1,011
Mar	0	311	311
Apr	0	-195	-195
May	0	189	189
Jun	-4	183	179
	-4	941	937
	-0.01%	1.40%	1.39%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	144	144
Sep	0	-853	-853
Oct	0	2,692	2,692
Nov	0	-36	-36
Dec	0	-4,749	-4,749
Jan	0	-1,180	-1,180
Feb	0	42	42
Mar	0	1,303	1,303
Apr	0	-1,795	-1,795
May	0	819	819
Jun	-11	21	9
	-11	-3,296	-3,307
	0.00%	-1.01%	-1.02%

**ATMOS ENERGY CORPORATION**  
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**ATMOS ENERGY CORPORATION**  
**Case No. GR-2010-0192**  
**WEATHER and DAYS NORMALIZATION**

SYSTEM: SE		CLASS : SGS				
		Normalized Sales per Customer				
Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	9,609	83	9,692	3,435	2,8215	
Aug	7,024	11	7,035	3,424	2,0545	
Sep	7,493	530	8,023	3,397	2,3618	
Oct	10,809	3,098	13,906	3,398	4,0925	
Nov	22,830	-3,594	19,236	3,430	5,6082	
Dec	69,259	-10,671	58,587	3,483	16,8209	
Jan	92,936	4,377	97,314	3,484	27,9316	
Feb	78,868	-1,913	76,955	3,479	22,1198	
Mar	63,049	4,297	67,346	3,494	19,2747	
Apr	27,842	1,688	29,530	3,484	8,4758	
May	14,811	1,040	15,851	3,441	4,6065	
Jun	8,145	95	8,240	3,406	2,4193	
	412,674	-960	411,714	41,355	119,4673	
		-0.23%				

SYSTEM: ALL		CLASS : SGS				
		Normalized Sales per Customer				
Billing Month	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	17,341	421	17,762	5,998	2,9613	
Aug	13,071	163	13,234	5,977	2,2141	
Sep	14,086	-497	13,590	5,924	2,2940	
Oct	19,865	6,236	26,101	5,924	4,4060	
Nov	45,786	-3,756	42,030	6,052	6,9448	
Dec	134,193	-16,155	118,038	6,126	19,2684	
Jan	181,941	3,176	185,117	6,125	30,2233	
Feb	154,544	-861	153,683	6,148	24,9973	
Mar	120,475	5,910	126,386	6,151	20,5472	
Apr	59,878	-302	59,576	6,132	9,7156	
May	29,273	2,049	31,322	6,042	5,1841	
Jun	15,110	283	15,394	5,953	2,5859	
	805,564	-3,330	802,234	6,046	132,6884	
		-0.41%				

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jul	0	83	83
Aug	0	11	11
Sep	0	530	530
Oct	0	3,098	3,098
Nov	0	-3,594	-3,594
Dec	0	-10,671	-10,671
Jan	0	4,377	4,377
Feb	0	-1,913	-1,913
Mar	0	4,297	4,297
Apr	0	1,688	1,688
May	0	1,040	1,040
Jun	-23	119	95
	-23	-936	-960
	-0.01%	-0.23%	-0.23%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jul	0	421	421
Aug	0	163	163
Sep	0	-497	-497
Oct	0	6,236	6,236
Nov	0	-3,756	-3,756
Dec	0	-16,155	-16,155
Jan	0	3,176	3,176
Feb	0	-861	-861
Mar	0	5,910	5,910
Apr	0	-302	-302
May	0	2,049	2,049
Jun	-39	322	283
	-39	-3,291	-3,330
	0.00%	-0.41%	-0.41%

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**ATMOS ENERGY CORPORATION**  
CASE NO. GR-2010-0192  
**WEATHER & DAYS NORMALIZATION**

SYSTEM: West		CLASS : MGS				
Billing Month	Normalized Sales per Customer					
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	1,651	14	1,665	45	37,0046	
Aug	1,406	5	1,410	46	30,6554	
Sep	1,753	-111	1,642	45	36,4926	
Oct	1,961	252	2,213	45	49,1773	
Nov	4,263	-23	4,239	47	90,2006	
Dec	7,595	-497	7,097	47	151,0091	
Jan	9,456	70	9,526	46	207,0846	
Feb	6,622	663	7,285	45	161,8922	
Mar	5,450	135	5,584	45	124,0972	
Apr	3,647	-303	3,345	46	72,7067	
May	1,774	174	1,949	46	42,3590	
Jun	977	84	1,062	47	22,5880	
	46,555	462	47,017	550	1025,8347	
		0.99%				

SYSTEM: NE		CLASS : MGS				
Billing Month	Normalized Sales per Customer					
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	14,721	246	14,966	338	44,2789	
Aug	12,129	182	12,310	323	38,1126	
Sep	13,278	-603	12,676	329	38,5276	
Oct	22,753	1,886	24,639	319	77,2369	
Nov	42,482	59	42,541	340	125,1198	
Dec	74,922	-5,197	69,725	329	211,9297	
Jan	84,147	-1,779	82,368	335	245,8742	
Feb	67,931	1,389	69,321	329	210,7009	
Mar	54,391	2,021	56,412	327	172,5127	
Apr	34,469	-2,639	31,830	325	97,9395	
May	18,723	815	19,538	330	59,2071	
Jun	11,545	-38	11,507	316	36,4151	
	451,491	-3,659	447,832	3,940	1363,9563	
		-0.81%				

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	5	5
Sep	0	-111	-111
Oct	0	252	252
Nov	0	-23	-23
Dec	0	-497	-497
Jan	0	70	70
Feb	0	663	663
Mar	0	135	135
Apr	0	-303	-303
May	0	174	174
Jun	-11	96	84
	-11	474	462
	-0.02%	1.02%	0.99%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	182	182
Sep	0	-603	-603
Oct	0	1,886	1,886
Nov	0	59	59
Dec	0	-5,197	-5,197
Jan	0	-1,779	-1,779
Feb	0	1,389	1,389
Mar	0	2,021	2,021
Apr	0	-2,639	-2,639
May	0	815	815
Jun	-45	8	-38
	-45	-3,613	-3,659
	-0.01%	-0.80%	-0.81%

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**ATMOS ENERGY CORPORATION**  
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**WEATHER and DAYS NORMALIZATION**

SYSTEM: SE		CLASS : MGS				
Billing Month	Normalized Sales per Customer					
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	11,729	78	11,807	554	21,3115	
Aug	11,495	10	11,505	527	21,8317	
Sep	23,862	703	24,565	537	45,7449	
Oct	30,417	2,472	32,889	532	61,8208	
Nov	39,478	-3,718	35,759	531	67,3436	
Dec	84,050	-9,321	74,729	541	138,1316	
Jan	84,028	3,382	87,409	527	165,8624	
Feb	90,448	-1,401	89,048	557	159,8701	
Mar	62,745	4,990	67,735	538	125,9022	
Apr	32,728	1,293	34,020	546	62,3085	
May	21,541	714	22,254	529	42,0686	
Jun	12,105	63	12,168	526	23,1329	
	504,625	-736	503,889	6,445	938,1958	
					-0.15%	

SYSTEM: ALL		CLASS : MGS				
Billing Month	Normalized Sales per Customer					
	Mcf Actual	Mcf Adjustment	Mcf Normal	Customers	Normal Usage per Customer	
Jul	28,101	337	28,438	937	30,3501	
Aug	25,030	196	25,226	896	28,1539	
Sep	38,893	-11	38,883	911	42,6814	
Oct	55,131	4,609	59,740	896	66,6743	
Nov	86,222	-3,683	82,540	918	89,9124	
Dec	166,567	-15,015	151,551	917	165,2688	
Jan	177,631	1,673	179,303	908	197,4705	
Feb	165,002	652	165,653	931	177,9306	
Mar	122,585	7,146	129,731	910	142,5620	
Apr	70,845	-1,649	69,195	917	75,4583	
May	42,038	1,703	43,741	905	48,3327	
Jun	24,628	109	24,737	889	27,8253	
	1,002,671	-3,932	998,739	911	1096,0100	
					-0.39%	

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	10	10
Sep	0	703	703
Oct	0	2,472	2,472
Nov	0	-3,718	-3,718
Dec	0	-9,321	-9,321
Jan	0	3,382	3,382
Feb	0	-1,401	-1,401
Mar	0	4,990	4,990
Apr	0	1,293	1,293
May	0	714	714
Jun	-53	116	63
	-53	-683	-736
	-0.01%	-0.14%	-0.15%

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Aug	0	196	196
Sep	0	-11	-11
Oct	0	4,609	4,609
Nov	0	-3,683	-3,683
Dec	0	-15,015	-15,015
Jan	0	1,673	1,673
Feb	0	652	652
Mar	0	7,146	7,146
Apr	0	-1,649	-1,649
May	0	1,703	1,703
Jun	-110	219	109
	-110	-3,822	-3,932
	-0.01%	-0.38%	-0.39%

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT  
COST OF SERVICE**

**APPENDIX 5  
Advertising and Promotional Expenses**

**ATMOS ENERGY CORPORATION**

**CASE NO. GR-2010-0192**

## Our energy fuels homes and communities.

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Providing safe, reliable natural gas is our job. But energizing communities is our responsibility. That's why, in addition to more comfortable and efficient homes and businesses, we provide for tax revenues that fuel local economies and volunteer our time to help community causes. It's all part of being your natural gas company.

**ATMOS**  
energy®

[www.atmosenergy.com](http://www.atmosenergy.com)



## Shared energy can keep a whole community warm.

Being sensitive to those in need is a big part of being a responsible member of the community. Every year, we provide money to help low-income families and individuals pay their natural gas bill. And in many of our communities, we provide energy-saving items to help those in need lower their energy bills. Doing the right thing is the way we do business at Atmos Energy, your natural gas company.

**ATMOS**  
energy.

[www.atmosenergy.com](http://www.atmosenergy.com)



## Your family deserves the comfort of natural gas.

Natural gas is comfortable energy. It heats your water faster and keeps your home warmer. And you'll cook like a professional chef on a natural gas range. It's also the most efficient and safest traditional energy source. For your home, choose responsible energy from Atmos Energy, your natural gas company.

**ATMOS**  
energy.

[www.atmosenergy.com](http://www.atmosenergy.com)





You can't call energy  
"responsible" if it's  
heating the Earth  
more than your home.

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A home with natural gas appliances produces about half the carbon dioxide emissions of an all-electric home. This helps reduce harmful emissions that are linked to global warming. It's just one more thing you can feel good about from Atmos Energy, your natural gas company.

**ATMOS**  
energy®

[www.atmosenergy.com](http://www.atmosenergy.com)

