Missouri Public Service Commission

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August 29, 2001

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Missouri Public Service Commission

Mr. Dale Hardy Roberts
Secretary/Chief Regulatory Law Judge
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102

RE: Case No. GW-2001-398
Commission Inquiry into Purchased Gas Cost Recovery

Dear Mr. Roberts:

Enclosed for filing are an original and 8 copies of the Final Report of the Commission's Task Force in the above-referenced case. A copy of the Report has also been sent to all Task Force members, and to all parties who intervened in the case.

As chair of the Task Force I have been pleased with the level of active participation by the members, both at meetings and in comments to drafts of the Report. The members have worked hard to encourage each member to develop and express their thoughts on the issues. The result is, I believe, a product that the Commission can consider when planning to meet the needs of Missouri natural gas customers and LDCs in the future.

I thank the Commission for the opportunity to work with the members of the task force. If the Commission has any questions of the Task Force, I would be glad to relay them to the members.

Sincerely yours,

Warren T. Wood, P.E.
Missouri Public Service Commission
Energy Department Manager
Chair, Gas Cost Recovery Task Force

WTW:sw
Enclosure
cc: Task Force Members and Parties

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Final Report of the

Missouri Public Service Commission's

Natural Gas Commodity Price Task Force

Issued: August 29, 2001

In the Matter of a Commission Inquiry) Case No. GW-2001-398
into Purchased Gas Cost Recovery.)

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Table of Contents

1. Executive Summary, Observations, and Recommendations

Task Force Organization

The Missouri Public Service Commission's (Commission, MoPSC or PSC) January 23, 2001, Order Establishing Case and Creating Task Force stated:

> "Recent price increases in the commodity cost of natural gas have lead to significant increases in the prices paid by customers of natural gas local distribution companies (LDCs). The Commission establishes this case to investigate the process for the recovery of natural gas commodity cost increases by LDCs from their customers. A natural gas commodity price task force will be created to investigate and discuss options on this issue."

The MoPSC further stated in its Order:

> "The Commission wants to hear from the public on the issues raised herein, and to that end, will direct its Staff to propose general time frames and dates for local public meetings around the state."

The Order also directed notice to interested parties so that they would have an opportunity to apply for membership on the task force.

Numerous parties expressed interest in joining the task force. In its March 15, 2001, Order Naming Participants of the Natural Gas Commodity Price Task Force and April 9, 2001, Second Order Naming Participants of the Natural Gas Commodity Price Task Force, the Commission established the task force membership. Stakeholders from among the LDCs, consumers, and others were assigned to the task force. All stakeholders expressing an interest in task force participation were granted representation. A list of all task force members is provided in Appendix C.

Task Force Public Meetings

The first task force meeting took place April 20, 2001, in Kansas City, MO. The morning session was devoted to discussions regarding the organization, purpose and goals of the task force. Much time was spent helping participants understand what happened during the past winter and why. How the current natural gas cost recovery process works was also discussed. The morning discussions laid the groundwork for the afternoon. The primary focus of the afternoon session was discussion of options for changing the natural gas costs recovery process. The discussions involved significant debate on the pros and cons of the current system and the objectives for any changes that the task force would recommend. Most of the options for future consideration were developed in this meeting and introduced for comment in the public meetings to hear the public's concerns.

Subsequent to the first task force meeting six public meetings were held around the state:

Public Meeting Areas & Dates		Approximate Attendance Public	Task Force Members
Kansas City	April 26, 2001	22	8
St. Louis	May 4, 2001	6	5
Jefferson City	May 10, 2001	38	11
Kirksville	May 24, 2001	10	3
Sikeston	June 7, 2001	0	3
Joplin	June 12, 2001	0	4

The public meetings of the task force were held to inform the public about how the current process works, receive input from the public, and hear the public's concerns on current options under consideration by the task force for future modifications to the process. The transcripts from these meetings are available on the Internet at the link identified in Appendix A.

Comments from the public meetings focused on the high natural gas heating bills experienced last winter, disconnect notices, budget billing program adjustments, and insufficient funding for low and fixed income programs. The public input had bearing on different options that the task force developed, and later voted upon. A constant theme in the public meetings was the need to better address the needs of low and fixed income customers, and support for reducing the volatility of natural gas prices, even if a premium must be paid to do so.

Following the last of the public meetings the task force held its remaining task force meetings as follows:

Task Force Meeting Areas & Dates	
St. Louis	June 15, 2001
Jefferson City	June 29, 2001
Jefferson City	July 12, 2001

The task force divided itself into four subcommittees to discuss the issues identified at the first meeting, and to recommend options for future action. Each subcommittee was charged with further developing options and potential recommendations to be presented to the full task force. The final options identified and voted on by the full task force are provided in section 4. Section 3 provides an analysis of the votes of the task force members, which formed the basis for the recommendations contained in this report.

Policy Statement and Recommendations

In addition to the recommendations regarding specific options, the task force developed and voted on a general policy statement. All stakeholder groups broadly supported this statement:

Natural Gas Commodity Price Task Force Policy Statement

The Missouri Public Service Commission's Natural Gas Commodity Price Task Force (Task Force) examined several means or mechanisms that may be used to mitigate large-scale swings in natural gas prices. Each mechanism may be desirable in certain circumstances, but each has unique risks and costs that require evaluation in each circumstance.

The Task Force reached a consensus regarding the overall strategy of employing various mechanisms to mitigate and control upward gas price volatility. Our sense was that Local Distribution Companies (LDCs) in Missouri should be encouraged by the Commission and all other stakeholders to utilize various mitigation tools to balance market price risks, benefits, and price stability. LDCs should create a balanced portfolio of gas supply contracts with various price structures in an attempt to reduce, but not eliminate, market sensitive pricing. Part of a balanced portfolio may be over market at times and this is necessary to dampen price volatility. It is also recognized that gas price stability and especially limits to upward gas price spikes are desired and valued by many customers but may result in higher gas costs over the long-term due to the costs of hedging and fixed-price contracts.

A number of options were supported by a majority. The tables in section 3 show that the greatest level of consensus exists on options 2.h, 3.a, 3.c, 4.a, 4.b, and 4.d. Option 2.h deals specifically with actions to address the needs of low and fixed income customers through legislative actions and was consistently supported in the public meetings. Options 3.a and 3.c are different from the other options in that they deal with whether utilities should consider using fixed price contracts, call options, collars, and natural gas storage. The task force strongly supported the recommendation that gas utilities "consider" using these options as part of an analysis of prudent gas purchasing options. The policy statement adequately addresses the caveats of using these mechanisms. All stakeholder groups strongly supported the options identified and recommendations addressed in the following areas:

2.h) Alternative Recovery Mechanisms for Low and Fixed Income Customers w/Legislative Actions for Collection of Funding vs. Ratepayer Allocations
3.a) Fixed Price Contracts, Call Options, and Collars
3.c) Natural Gas Storage
4.a) Properly Structured Incentive Plans
4.b) Performance Based Regulations (PBRs) in the Form of Rate or Bill Caps Should Not Be Implemented
4.d) Expanded Information Exchange between LDCs, PSC, and OPC Regarding Procurement Plans & Strategies Should be Pursued to Reduce Disincentives in Gas Costs

The task force is also making a number of other recommendations that were not as broadly supported overall. This group of recommendations received a favorable response from the voting task force members. These options did not however receive as broad a range of support as those previously identified. This group of options includes:

1.a) Use of Dual Tariffs w/Fixed Price or Standard PGA Options
2.b) Changing PGA Rates More Frequently (4 times per year was discussed)
3.b) Use of Weather Derivatives
3.d) Use of Outsourcing/Agency Agreements
4.c) The Commission should Pursue Incentive Measures for Encouraging Energy Efficiency

The remaining options presented in this report did not receive widespread support from the various stakeholders. Therefore the task force has included the materials developed on these options, but does not provide recommendations regarding these options. Tables 3.1, 3.2, 3.3 and 3.4 provide lists of the options addressed by the task force and how the task force members voted on each of them.

The task force hopes that decision makers find this document useful in assessing the options that are available, the associated advantages and disadvantages of each, and which options this diverse group regarded favorably. Numerous members of the task force have indicated that they found development of these options and the associated discussions with other stakeholder groups both enlightening and productive. The task force mechanism provided a forum for participation by stakeholder groups that do not often have a voice in the processes that affect them and an opportunity for all stakeholders to discuss and recommend options to their mutual benefit.

It is important to note that as of the date of this Final Report of the Missouri Public Service Commission's Natural Gas Commodity Price Task Force the Commission has not reviewed or approved any of the statements or recommendations of this report. The recommendations of this report were a direct result of the voting results of the voting task force members and do not necessarily represent the opinions of any particular group or individual.

2. Input from Public Meetings

In its January 23, 2001 Order that created this case the MoPSC stated that:

> "The Commission wants to hear from the public on the issues raised herein, and to that end, will direct its Staff to propose general time frames and dates for local public meetings around the state."

The first of the task force meetings took place April 20, 2001 in Kansas City, MO. The afternoon focus of this meeting was brainstorming on ideas for how to change the natural gas costs recovery process in the future. Most of the options for future consideration were developed in this meeting. These options were noted in the public meetings that followed to hear the public's concerns. The six task force public meetings held around the state were:

Public Meeting Areas & Dates	
Kansas City	April 26, 2001
St. Louis	May 4, 2001
Jefferson City	May 10, 2001
Kirksville	May 24, 2001
Sikeston	June 7, 2001
Joplin	June 12, 2001

The public meetings of the task force were held to discuss the current process, what options the task force is considering to change this process, and to hear the public's concerns. The transcripts from these meetings are available on the Internet at the link identified in Appendix A.

Not surprisingly, much of the input from the public meetings focused on how high 2000-01 winter natural gas heating bills were, disconnect notices, budget billing program adjustments, utility profit levels, deregulation of wellhead natural gas, and low and fixed income programs running out of funding. A number of concerned citizens indicated strong support for programs that reduce the volatility of natural gas prices, even if a small premium must be paid to do so.

The task force viewed the public meetings as critical because they provided an opportunity to gain the public's perspective of how well the current process worked this past winter and opinions regarding the options the task force was considering. The input from public meetings repeatedly showed that some of the public participants are interested in the process but generally most consumers are most interested in what changes to the process will do to their natural gas bills. Not surprisingly, the greatest interest regarding natural gas is what it costs. The unprecedented gas prices of this past winter were substantial and had a very clear affect on the pocket books of many Missouri consumers.

One consistent message throughout the task force meetings was concern for the hardships of last winter on low and fixed income customers. In depth information from the Energy Information Administration (EIA), a branch of the U.S. Department of Energy (DOE), is summarized below[1] describing this past winter's impact on low and fixed income customers.

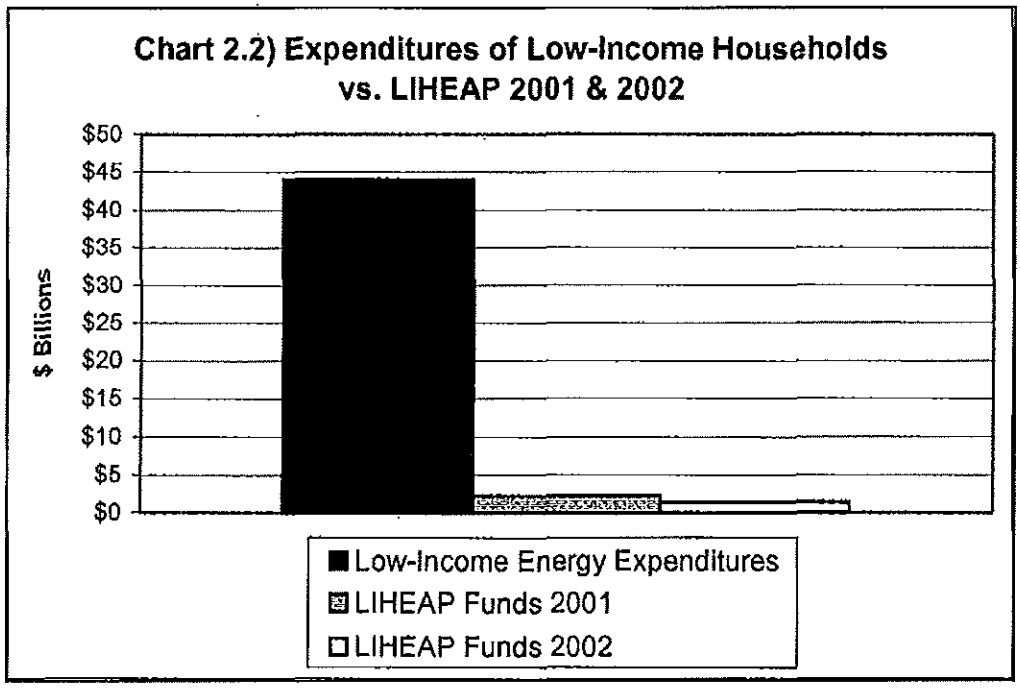
While all customers suffered the impact of increased natural gas prices, the DOE estimates that those households with incomes at or below 60% of their state's median income (roughly $21,000 for a family of three) spent approximately 20% more of their annual income on energy costs. The "Energy Burden" placed on low income families is estimated at 19.5% (bills/annual income) while the average for all other households is 3.7%. When examined by type of fuel used for heating, the energy burden for those customers utilizing natural gas escalated to 24% and 5% respectively as shown in Table 2.1. Overall, the DOE reports that 2000-01 winter bills for natural gas showed an increase of 42% compared to bills for the 1999-00 winter heating season.

Table 2.1) Yearly Impact of Energy Costs by Heating Fuel

Heating Fuel	Low-Income Total Energy Bills Oct '00 – Sep '01	Low-Income Twelve Month Average Energy Burden (% of Income spent)	Other Consumers: Total Energy Bills Oct '00 - Sep '01	Other Consumers: Average Energy Burden (% of income spent)
Fuel Oil	$1,672	21%	$2,274	5%
Natural Gas	$1,806	24%	$2,133	5%
Electricity	$1,086	13%	$1,369	3%
Propane	$1,963	22%	$2,741	6%
Kerosene	$1,270	15%	--	--

1 "The Winter Behind, The Summer Ahead: A Harsh Spring Faces Low-Income Energy Consumers" by Meg Power, PhD of Economic Opportunity Studies

While more financial assistance may be needed to help low-income families pay for energy costs, preventative measures, such as weatherization of low-income housing, can prove to be a viable economic alternative. The DOE estimates that weatherization investments already in place in low-income housing may have resulted in avoided energy costs of nearly $1.2 billion, which is 55% of the projected LIHEAP expenditures of $2.2 billion in FY 2001. As of midyear 2001 the President's LIHEAP Budget for FY 2002 was $1.4 billion. This is illustrated in Chart 2.2.



Another winter of unusually high natural gas prices would undoubtedly pose additional hardship to the lower-income consumer already struggling with the high cost of energy from this past winter and possibly still carrying forward unpaid balances. Task force Options 2.g and 2.h deal specifically with alternative approaches for low and fixed income customers. Option 2.h, a legislative approach for low and fixed income customers, was broadly supported by all stakeholder groups of the task force.

3. Task Force Member Votes & Recommendations

In its last meeting on July 12, 2001, the task force voted on the options that the four subcommittees had developed for consideration. Each task force member that attended the last meeting, and had attended at least one other meeting, voted on the options presented. The results of this voting process formed the basis for the recommendations contained in this report. Each task force member identified the stakeholder group they were most closely associated with; utility, consumer, or other interest. Utility personnel typically represented utility interests. Both members of the general public and the Office of the Public Counsel (OPC or Public Counsel) represented consumer interests. Other interests were represented by personnel from the Missouri Public Service Commission Staff (Staff), energy consultants, general practice attorneys, and attorneys who have represented the interest of large commercial and industrial consumers.

Each voting task force member voted on each option using a 0 to 10 scale. A vote of 0 indicated that the task force member strongly believed that this option **should not be** implemented. A vote of 10 indicated that the task force member strongly believed that this option **should be** implemented. A vote of 5 indicated that the task force member was indifferent to this option being implemented. Some of the options are stated as things to stop doing or to eliminate in the current process. A vote of 0 on this type of option indicated that the task force member believed that the action or item being voted upon should remain in the current process.

The options developed by the task force and voted upon:

Group 1: Choice Issues
1.a) Use of Dual Tariffs w/Fixed Price or Standard PGA Options
1.b) Dual Tariff – Fixed Bill or Standard PGA
1.c) Dual Tariff – Weatherproof or Standard PGA
1.d) Supplier Choice – Partial Consumer Choice With Default Service Option
1.e) Supplier Choice –LDC Fully Exit the Merchant Function
1.f) State Takeover Gas Purchasing Function
1.g) State Oversees Third Party Purchasing of Gas for State

Group 2: Process: Alternate PGA Methods
2.a) How Missouri Does It Now
2.b) Changing PGA Rates More Frequently (4 times per year was discussed)
2.c) Changing Frequency of PGA Filing – Less Frequently
2.d) Eliminating the PGA and Collecting in General Rates
2.e) PGA Rate Caps with Summer Recoveries
2.f) PGA Rate Floors and Funding Price Stabilizing Funds
2.g) Alternate Recovery Mechanisms for Low and Fixed Income Customers, Developed Through the Regulatory Process
2.h) Alternative Recovery Mechanisms for Low and Fixed Income Customers w/Legislative Actions for Collection of Funding vs. Ratepayer Allocations

Group 3: Price Mitigation Tools
3.a) Fixed Price Contracts, Call Options, and Collars
3.b) Weather Derivatives
3.c) Natural Gas Storage
3.d) Outsourcing/Agency Agreements

Group 4: Incentive / Performance
4.a) Properly Structured Incentive Plans
4.b) Performance Based Regulations (PBRs) in the Form of Rate or Bill Caps Should Not Be Implemented
4.c) The Commission Should Pursue Incentive Measures for Encouraging Energy Efficiency
4.d) Expanded Information Exchange between LDCs, PSC, and OPC Regarding Procurement Plans & Strategies Should be Pursued to Reduce Disincentives in Gas Costs

The next four pages are Tables 3.1, 3.2, 3.3, and 3.4. These tables are the completed voting forms for all voting task force members. The identifiers (number.letter) in these tables coincide with the options developed by the four groups and those shown in the list above and the Table of Contents.

Table 3.1 - Group 1 Options, Task Force Votes

OPTIONS (number.letter identifiers match Table of Contents & Section 4 identifiers):

	NAMES:	Representing	1.a	1.b	1.c	1.d	1.e	1.f	1.g
Consumer	Bill Guinther	*Parkway School District*	8	0	0	8	3	6	6
	Martha Hogerty	*Office Public Counsel*	5	5	7	5	5	3	3
	Robert Kindle	*Concerned Citizen*	8	4	3	2	0	0	0
	Jan Marcason	*Mid Amer. Assist. Coal.*	6	6	2	7	0	0	3
	Mary Matalone	*Concerned Citizen*	4	9	2	0	0	0	0
	Rich Taylor	*Concerned Citizen*	7	7	7	0	0	0	0
	Vicki Walker	*Concerned Citizen*	0	2	0	0	0	6	7
	Jim Busch	*Office Public Counsel*	7	0	3	5	5	1	1
	Barb Meisenheimer	*Office Public Counsel*	7	7	9	4	2	5	5
	Doug Micheel	*Office Public Counsel*	5	5	7	5	5	3	3
	Brenda Wilbers	*DNR Energy Center*	6	3	3	5	0	5	5
	Average		5.7	4.4	3.9	3.7	1.8	2.6	3.0
Utility	Bob Amdor	*UtiliCorp United*	5	5	6	3	3	0	3
	David Beler	*Fidelity Natural Gas*	3	1	3	2	0	2	8
	Pat Childers	*Atmos Energy Corp.*	7	7	7	7	7	0	0
	Jim Fischer	*Fischer & Dority P.C.*	7	5	7	3	5	0	0
	Rob Hack	*Missouri Gas Energy*	6	6	5	2	7	2	2
	Rich Kovach	*Ameren Services*	1	0	6	0	7	5	7
	Cathleen Meyer	*City Utilities Springfield*	8	5	3	0	0	0	5
	Mike Pendergast	*Laclede Gas Company*	5	3	3	1	5	0	1
	Gary Wood	*Bethany Municipal Gas*	6	7	7	7	3	1	1
	Tom Byrne	*Ameren Corporation*	1	1	5	0	5	0	1
	Scott Glaeser	*Ameren Corporation*	2	0	5	0	8	0	0
	Average		4.6	3.6	5.1	2.3	4.5	0.9	2.5
Other	Stuart Conrad	*Finnegan & Conrad P.C.*	10	10	10	10	0	0	0
	Jeremiah Finnegan	*Finnegan & Conrad P.C.*	10	10	10	10	10	8	8
	Charles Laderoute	*Independent Consultant*	9	7	5	8	0	0	7
	Anne McGregor	*MC² Utility Consultants*	7	6	5	10	4	8	10
	Joseph Schulte	*Gas Workers Local 5-6*	4	6	7	0	0	0	0
	Tim Schwarz	*Public Serv. Comm. Staff*	8	8	8	1	1	0	2
	David Sommerer	*Public Serv. Comm. Staff*	8	7	5	5	2	1	2
	Warren Wood	*Public Serv. Comm. Staff*	9	10	6	3	2	4	5
	Lesa Jenkins	*Public Serv. Comm. Staff*	8	10	9	3	1	0	0
	Average		8.1	8.2	7.2	5.6	2.2	2.3	3.8
	Consensus Avg.		6.1	5.4	5.4	3.9	2.9	2.0	3.1

Option Titles

1.a) Use of Dual Tariffs w/Fixed Price or Standard PGA Options

1.b) Dual Tariff – Fixed Bill or Standard PGA

1.c) Dual Tariff – Weatherproof or Standard PGA

1.d) Supplier Choice, Partial Consumer Choice With Default Service Option

1.e) Supplier Choice, LDC Fully Exit the Merchant Function

1.f) State Takeover Gas Purchasing Function

1.g) State Oversees Third Party Purchasing of Gas for State

All votes should be given as a number from 0 to 10.

A vote of **0** means that you feel strongly that this option **should not** be implemented.

A vote of **10** means that you feel strongly that this option **should** be implemented.

A vote of **5** means that you are generally **indifferent** to the implementation of this option.

Table 3.2 - Group 2 Options, Task Force Votes

OPTIONS (number.letter identifiers match Table of Contents & Section 4 identifiers):

	NAMES:	Representing	2.a	2.b	2.c	2.d	2.e	2.f	2.g	2.h
Consumer	Bill Guinther	*Parkway School District*	3	7	0	4	0	3	10	10
	Martha Hogerty	*Office Public Counsel*	5	5	6	10	5	5	10	10
	Robert Kindle	*Concerned Citizen*	8	8	2	0	0	0	5	5
	Jan Marcason	*Mid Amer. Assist. Coal.*	5	2	7	2	7	0	10	10
	Mary Matalone	*Concerned Citizen*	9	0	7	2	8	5	2	8
	Rich Taylor	*Concerned Citizen*	0	8	0	10	3	0	0	5
	Vicki Walker	*Concerned Citizen*	3	3	6	6	0	0	9	9
	Jim Busch	*Office Public Counsel*	5	5	5	8	2	4	9	9
	Barb Meisenheimer	*Office Public Counsel*	5	0	7	10	6	6	7	7
	Doug Micheel	*Office Public Counsel*	5	5	5	10	5	5	10	10
	Brenda Wilbers	*DNR Energy Center*	4	7	5	6	4	5	10	10
	Average		4.7	4.5	4.5	6.2	3.6	3.0	7.5	8.5
Utility	Bob Amdor	*UtiliCorp United*	8	10	0	0	0	3	7	10
	David Beier	*Fidelity Natural Gas*	8	10	0	0	3	3	2	8
	Pat Childers	*Atmos Energy Corp.*	4	10	0	0	0	0	7	10
	Jim Fischer	*Fischer & Dority P.C.*	8	10	0	0	0	0	5	10
	Rob Hack	*Missouri Gas Energy*	5	7	1	0	2	5	6	6
	Rich Kovach	*Ameren Services*	6	9	0	0	1	2	1	9
	Cathleen Meyer	*City Utilities Springfield*	6	8	3	0	4	2	5	10
	Mike Pendergast	*Laclede Gas Company*	5	10	1	0	2	5	2	10
	Gary Wood	*Bethany Municipal Gas*	6	4	4	3	4	3	4	6
	Tom Byrne	*Ameren Corporation*	6	9	1	0	1	1	0	9
	Scott Glaeser	*Ameren Corporation*	6	9	0	0	1	2	1	10
	Average		6.2	8.7	0.9	0.3	1.6	2.4	3.6	8.9
Other	Stuart Conrad	*Finnegan & Conrad P.C.*	0	8	0	10	2	0	0	0
	Jeremiah Finnegan	*Finnegan & Conrad P.C.*	0	8	0	10	5	0	0	5
	Charles Laderoute	*Independent Consultant*	2	9	1	0	0	1	0	10
	Anne McGregor	*MC² Utility Consultants*	0	10	0	10	0	0	10	10
	Joseph Schulte	*Gas Workers Local 5-6*	7	8	0	0	3	2	3	5
	Tim Schwarz	*Public Serv. Comm. Staff*	8	2	2	1	1	2	10	2
	David Sommerer	*Public Serv. Comm. Staff*	3	4	1	5	7	3	1	7
	Warren Wood	*Public Serv. Comm. Staff*	8	9	4	2	6	4	8	8
	Lesa Jenkins	*Public Serv. Comm. Staff*	8	6	0	0	1	2	2	7
	Average		4.0	7.1	0.9	4.2	2.8	1.6	3.8	6.0
	Consensus Avg.		5.0	6.8	2.1	3.6	2.7	2.3	5.0	7.8

Option Titles

2.a) How Missouri Does It Now

2.b) Changing PGA Rates More Frequently (4 times per yr. was discussed)

2.c) Changing Frequency of PGA Filing - Less Frequently

2.d) Eliminating the PGA and Collecting in General Rates

2.e) PGA Rate Caps with Summer Recoveries

2.f) PGA Rate Floors and Funding Price Stabilizing Funds

2.g) Alternative Recovery Mechanisms for Low and Fixed Income Customers Developed Through the Regulatory Process

2.h) Alternative Recovery Mechanisms for Low and Fixed Income Customers w/Legislative Actions for Collection of Funding vs. Ratepayer Allocations

All votes should be given as a number from 0 to 10.

A vote of 0 means that you feel strongly that this option should not be implemented.

A vote of 10 means that you feel strongly that this option should be implemented.

A vote of 5 means that you are generally indifferent to the implementation of this option.

Table 3.3 - Group 3 Options, Task Force Votes

OPTIONS (number.letter identifiers match Table of Contents & Section 4 identifiers):

	NAMES:	Representing	3.a	3.b	3.c	3.d
Consumer	Bill Guinther	*Parkway School District*	10	10	10	8
	Martha Hogerty	*Office Public Counsel*	10	5	10	5
	Robert Kindle	*Concerned Citizen*	8	0	10	4
	Jan Marcason	*Mid Amer. Assist. Coal.*	8	7	10	8
	Mary Matalone	*Concerned Citizen*	9	4	10	4
	Rich Taylor	*Concerned Citizen*	9	8	10	8
	Vicki Walker	*Concerned Citizen*	10	0	10	2
	Jim Busch	*Office Public Counsel*	10	0	10	5
	Barb Meisenheimer	*Office Public Counsel*	9	7	10	7
	Doug Micheel	*Office Public Counsel*	10	5	10	5
	Brenda Wilbers	*DNR Energy Center*	9	5	10	7
	Average		9.3	4.6	10	5.7
Utility	Bob Amdor	*UtiliCorp United*	10	10	10	10
	David Beier	*Fidelity Natural Gas*	10	5	10	8
	Pat Childers	*Atmos Energy Corp.*	10	5	10	5
	Jim Fischer	*Fischer & Dority P.C.*	10	5	10	5
	Rob Hack	*Missouri Gas Energy*	10	10	10	10
	Rich Kovach	*Ameren Services*	10	10	10	6
	Cathleen Meyer	*City Utilities Springfield*	10	6	10	9
	Mike Pendergast	*Laclede Gas Company*	10	8	10	8
	Gary Wood	*Bethany Municipal Gas*	7	7	7	7
	Tom Byrne	*Ameren Corporation*	10	9	10	5
	Scott Glaeser	*Ameren Corporation*	10	9	10	4
	Average		9.7	7.6	9.7	7.0
Other	Stuart Conrad	*Finnegan & Conrad P.C.*	10	8	10	4
	Jeremiah Finnegan	*Finnegan & Conrad P.C.*	10	9	10	8
	Charles Laderoute	*Independent Consultant*	10	8	10	10
	Anne McGregor	*MC² Utility Consultants*	10	10	10	10
	Joseph Schulte	*Gas Workers Local 5-6*	5	5	10	3
	Tim Schwarz	*Public Serv. Comm. Staff*	8	8	10	7
	David Sommerer	*Public Serv. Comm. Staff*	10	5	10	7
	Warren Wood	*Public Serv. Comm. Staff*	10	8	10	5
	Lesa Jenkins	*Public Serv. Comm. Staff*	10	8	10	7
	Average		9.2	7.7	10	6.8
	Consensus Avg.		9.4	6.6	9.9	6.5

Option Titles

3.a) Fixed Price Contracts, Call Options and Collars

3.b) Weather Derivatives

3.c) Natural Gas Storage

3.d) Outsourcing/Agency Agreements

All votes should be given as a number from 0 to 10.

A vote of **0** means that you feel strongly that this option **should not** be implemented.

A vote of **10** means that you feel strongly that this option **should** be implemented.

A vote of **5** means that you are generally **indifferent** to the implementation of this option.

Table 3.4 – Group 4 Options & Policy Statement, Task Force Votes

OPTIONS (number.letter identifiers match Table of Contents & Section 4 identifiers):

	NAMES:	Representing	4.a	4.b	4.c	4.d	Policy Stmnt
Consumer	Bill Guinther	*Parkway School District*	2	2	10	7	10
	Martha Hogerty	*Office Public Counsel*	3	10	7	9	7
	Robert Kindle	*Concerned Citizen*	10	10	10	8	9
	Jan Marcason	*Mid Amer. Assist. Coal.*	8	3	8	2	7
	Mary Matalone	*Concerned Citizen*	8	2	8	5	10
	Rich Taylor	*Concerned Citizen*	7	5	0	9	7
	Vicki Walker	*Concerned Citizen*	10	10	10	10	8
	Jim Busch	*Office Public Counsel*	2	9	10	9	10
	Barb Meisenheimer	*Office Public Counsel*	7	10	8	10	7
	Doug Micheel	*Office Public Counsel*	6	10	7	9	7
	Brenda Wilbers	*DNR Energy Center*	10	5	10	10	7
	Average		7.4	6.9	8.0	8.0	8.1
Utility	Bob Amdor	*UtiliCorp United*	10	10	10	10	10
	David Beier	*Fidelity Natural Gas*	5	8	8	10	10
	Pat Childers	*Atmos Energy Corp.*	10	10	0	7	10
	Jim Fischer	*Fischer & Dority P.C.*	10	10	10	7	10
	Rob Hack	*Missouri Gas Energy*	10	10	8	5	9
	Rich Kovach	*Ameren Services*	10	10	2	6	10
	Cathleen Meyer	*City Utilities Springfield*	8	9	5		10
	Mike Pendergast	*Laclede Gas Company*	10	10	6	6	10
	Gary Wood	*Bethany Municipal Gas*	6	6	6	6	6
	Tom Byrne	*Ameren Corporation*	10	9	5	7	10
	Scott Glaeser	*Ameren Corporation*	10	9	5	7	10
	Average		9.0	9.2	5.9	7.1	9.5
Other	Stuart Conrad	*Finnegan & Conrad P.C.*	8	10	0	3	8
	Jeremiah Finnegan	*Finnegan & Conrad P.C.*	6	10	0	8	8
	Charles Laderoute	*Independent Consultant*	9	3	8	9	10
	Anne McGregor	*MC² Utility Consultants*	0	10	10	0	10
	Joseph Schulte	*Gas Workers Local 5-6*	5	10	7	4	5
	Tim Schwarz	*Public Serv. Comm. Staff*	7	9	9	9	9
	David Sommerer	*Public Serv. Comm. Staff*	7	8	5	9	10
	Warren Wood	*Public Serv. Comm. Staff*	8	8	9	7	10
	Lesa Jenkins	*Public Serv. Comm. Staff*	10	8	10	9	10
	Average		6.7	8.4	6.4	6.4	8.9
	Consensus Avg.		7.7	8.2	6.8	7.2	8.8

Option Titles

4.a) Properly Structured Incentive Plans

4.b) Performance Based Regulations (PBRs) in the Form of Rate or Bills Caps Should Not Be Implemented

4.c) The Commission Should Pursue Incentive Measures for Encouraging Energy Efficiency

4.d) Expanded Information Exchange Between LDCs, PSC, and OPC Regarding Procurement Plans & Strategies Should Be Pursued to Reduce Disincentives in Gas Costs

(Policy Statement) **See Page 3 or 15**

All votes should be given as a number from 0 to 10.

A vote of **0** means that you feel strongly that this option **should not** be implemented.

A vote of **10** means that you feel strongly that this option **should** be implemented.

A vote of **5** means that you are generally **indifferent** to the implementation of this option.

The voting results shown in Tables 3.1, 3.2, 3.3 and 3.4 can be assessed in different ways. The first would gauge support within each stakeholder group (utility, consumer, and other). An option was considered generally favorable if it received a vote of 6.0 or higher on a scale of 10. If all stakeholder groups supported a recommendation with a vote of 6.0 or higher, it is being treated as a "strong" recommendation of the task force. The Office of the Public Counsel has objected to this criterion. The following provides information on which options were favored by the different stakeholder groups but does not constitute a recommendation of the task force group because a sufficient level of consensus did not result from the task force voting. The level of consensus on these different options is addressed in more detail below.

The utility stakeholders favored the following options:
2.a, 2.b, 2.h, 3.a, 3.b, 3.c, 3.d, 4.a, 4.b, 4.d, and the policy statement.

The consumer stakeholders favored the following options:
2.d, 2.g, 2.h, 3.a, 3.c, 4.a, 4.b, 4.c, 4.d, and the policy statement.

The other stakeholders favored the following options:
1.a, 1.b, 1.c, 2.b, 2.h, 3.a, 3.b, 3.c, 3.d, 4.a, 4.b, 4.c, 4.d, and the policy statement.

A second assessment of the voting results analyzes support from all stakeholder groups. The options that all stakeholder groups supported were as follows: 2.h, 3.a, 3.c, 4.a, 4.b, 4.d, and the policy statement. Option 2.h deals specifically with options for how to address the needs of low and fixed income customers and was consistently supported in the public meetings. Options 3.a and 3.c are different from the other options in that they deal with the question of whether utilities should consider using fixed price contracts, call options, collars, and natural gas storage. The task force strongly supported the idea of utilities "considering" using these options available to them. However, these task force recommendations should not be construed as implying that use of these mechanisms in gas portfolios be preapproved. Options 4.a and 4.b deal with properly structured incentive plans and aspects of performance based regulations that should be avoided. Option 4.d recommends more exchange of data on procurement plans and strategies "up front".

The titles of the strongly supported recommendations of the task force are as follows:

2.h) Alternative Recovery Mechanisms for Low and Fixed Income Customers w/Legislative Actions for Collection of Funding vs. Ratepayer Allocations
3.a) Fixed Price Contracts, Call Options, and Collars
3.c) Natural Gas Storage
4.a) Properly Structured Incentive Plans
4.b) Performance Based Regulations (PBRs) in the Form of Rate or Bill Caps Should Not Be Implemented
4.d) Expanded Information Exchange between LDCs, PSC, and OPC Regarding Procurement Plans & Strategies Should be Pursued to Reduce Disincentives in Gas Costs

In addition to the recommendations regarding specific options, the task force developed and voted on a general policy statement. All stakeholder groups broadly supported this statement:

> **Policy Statement)** The Missouri Public Service Commission's Natural Gas Commodity Price Task Force (Task Force) examined several means or mechanisms that may be used to mitigate large-scale swings in natural gas prices. Each mechanism may be desirable in certain circumstances, but each has unique risks and costs that require evaluation in each circumstance.
> The Task Force reached a consensus regarding the overall strategy of employing various mechanisms to mitigate and control upward gas price volatility. Our sense was that Local Distribution Companies (LDCs) in Missouri should be encouraged by the Commission and all other stakeholders to utilize various mitigation tools to balance market price risks, benefits, and price stability. LDCs should create a balanced portfolio of gas supply contracts with various price structures in an attempt to reduce, but not eliminate, market sensitive pricing. Part of a balanced portfolio may be over market at times and this is necessary to dampen price volatility. It is also recognized that gas price stability and especially limits to upward gas price spikes are desired and valued by many customers but may result in higher gas costs over the long-term due to the costs of hedging and fixed-price contracts.

A third assessment of the voting results shows overall weighted averages of all stakeholder groups. This method captures options that some groups favored, and others did not strongly oppose. This method identified options that were favored by the task force but not as strongly as the "strong" recommendations. This method identified the following options that were not already identified as "strong" recommendations: 1.a, 2.b, 3.b, 3.d, and 4.c. Option 1.a recommends that customers have the option of choosing a fixed price per unit from their LDC in addition to the current PGA method. Option 2.b deals with the possibility of permitting LDCs to change their PGA rates more frequently than the current process permits. Option 3.b is different from the other options in that it deals with the question of whether utilities should consider using weather derivatives in a prudently developed gas supply plan. Option 3.d deals with LDCs contracting with third party providers to perform the gas supply planning/procurement function. Options 4.c recommends that the Commission pursue measures to encourage energy efficiency.

The titles of these options are as follows:

> **1.a)** Use of Dual Tariffs w/Fixed Price or Standard PGA Options
> **2.b)** Changing PGA Rates More Frequently (4 times per year was discussed)
> **3.b)** Use of Weather Derivatives
> **3.d)** Use of Outsourcing/Agency Agreements
> **4.c)** The Commission should Pursue Incentive Measures for Encouraging Energy Efficiency

4. Gas Costs Recovery & Price Mitigation Options & the Pros and Cons of Each

During the first task force meeting the members developed a list of options for changing the mechanisms by which natural gas costs are incurred and passed on to consumers. These options were grouped based upon their general concepts. The groups were Choice Issues, Process Analysis/Review, Price Mitigation Tools, and Incentive/Performance Plans. Much of the work of the task force's 2nd and 3rd meetings was directed at debating the aspects of each option and developing them for voting upon by the entire task force group. The option papers from the four groups are provided in this section of the task force report. These were the options that were voted on by the task force members in the last task force meeting held on July 12, 2001. The identifiers (number.letter) coincide with the identifiers used on the voting forms provided in Section 3 as Tables 3.1, 3.2, 3.3, and 3.4 and those shown in the Table of Contents.

Group 1 Option Papers: Choice Issues

During the task force discussions, seven options were discussed as possible consumer choice options for the purchase of natural gas: (a) Dual Tariff - Fixed Price or Standard Purchased Gas Adjustment (PGA), (b) Dual Tariff - Fixed Bill or Standard PGA, (c) Dual Tariff - Weather Proof or Standard PGA, (d) Supplier Choice - Partial Consumer Choice With Default Service Option, (e) Supplier Choice - LDC Fully Exit Merchant Function, (f) State Takeover Gas Purchasing Function, and (g) State Oversees Third Party Purchasing of Gas for State.

The first three choice options outlined below pertain to stabilizing the commodity portion of the bill with respect to fluctuations in weather and/or cost of gas and these options could be offered pursuant to a dual tariff approach where the consumer would have various rate or tariff options or could continue to pay for service from the LDC under the current PGA process. The fourth and fifth choice options pertain to selection of the natural gas supplier. In these two options, the LDC would still provide the local distribution service. If either of these options are selected, it is recommended that a pilot project be implemented in the state to give an LDC an opportunity to change its business practices, identify additional consumer education needs, and identify and address any problems before rolling out statewide to all small commercial and residential customers. The last two choice options pertain to creation of a statewide gas purchasing function.

In the following outline, a description of the seven consumer choice options will be discussed along with the pros and cons of each option.

1.a) Dual Tariff – Fixed Price or Standard PGA

The fixed price option is a fixed price per Ccf (100 cubic feet of gas) consumed, but the customer's bill will still be affected by usage related to weather or other factors. The customer knows the rate that will be paid, but a colder winter will result in a higher bill for more Ccfs consumed, and a warmer winter will result in a lower bill for fewer Ccfs consumed. If the customer chooses this program, he/she will pay a pre-determined rate for the volumes consumed. Example: Customer consumes 100 Ccf times flat rate of $0.75 or customer consumes 80 Ccf times a flat rate of $0.75.

Pros:

- Reduces price volatility and provides relative price stability.
- Customer knows what rate they will pay for the natural gas.
- Easier to budget.
- Provides price protection for the customer. If prices go higher than pre-determined rate, customer is capped at pre-determined rate.
- Promotes Energy Conservation. Customer can choose to set back thermostat when aware colder weather is approaching, thus reducing consumption.
- No true up in gas cost, but the flat rate will likely change on an annual basis.

Cons:

- Not a guarantee of savings. If market prices fall below pre-determined rate, customer would end up paying more than other customers (on standard PGA).
- Consumer education. Consumer may confuse fixed price with fixed bill or level payment option.
- It is unclear whether small LDC's have enough volume to cover the cost or if there is enough consumer demand to cover the cost of the option.

1.b) Dual Tariff – Fixed Bill or Standard PGA

If the customer chooses the fixed bill option he/she will pay a pre-determined dollar amount for natural gas service, regardless of the price of natural gas or usage due to the weather. Software is used to compute a consumer's bill based on previous natural gas consumption, contracted natural gas prices, average temperatures, and administrative costs. A tolerance is established so that a bill can be adjusted for changes in habits (e.g. turning up the thermostat and opening the windows). Example: Customer will pay $100.00 per month for gas consumption. A customer's usage patterns (a home with less insulation or a large number of residents) will affect the pre-determined monthly bill.

Pros:

- Reduces volatility and provides relative price stability (predetermined rate may change from year to year).
- Customer can budget for gas consumption.
- Provides price protection.
- Provides bill protection during cold winters.
- Some programs issue an annual efficiency report and provide immediate discounts for installing efficient appliances.

Cons

- Doesn't promote energy conservation as long as consumption falls within tolerance level range. Usage could creep up and customer may not notice usage increase if next year's predetermined rate is comparable.
- Consumer education. Difficulty in distinguishing Fixed Bill from Fixed Price or Weatherproof and explaining tolerance level.
- Customer would possibly be removed from the option or have to true-up the costs of monthly bills if consumption is outside of the tolerance level.
- It is unclear whether small LDC's have enough volume to cover the cost or if there is enough consumer interest to cover the cost of the option.
- Not all customers may qualify for the option (e.g. recently moved and/or insufficient information about usage patterns).

1.c) Dual Tariff – Weatherproof or Standard PGA

The customer under this program will pay for a fixed number of volumes consumed regardless of actual usage due to weather. The bill will vary based on price of gas. Software is used to compute a consumer's bill based on previous natural gas consumption, average temperatures, and administrative costs. The customer bill may ultimately be adjusted for the price of gas (e.g. if price of gas is $5 versus $3/Mcf), but it will not be adjusted if the usage varies because the weather is colder or warmer than normal.

Pros:

- Reduces volatility and provides price stability for weather.
- Customer can budget for gas consumption.
- Some programs issue an annual efficiency report and provide immediate discounts for installing efficient appliances.

Cons:

- Need a large utility customer base for outside vendor(s) to offer program.
- Doesn't promote energy conservation since customer does not see bill change for increased usage during cold weather. Customer may not consume within tolerance level range.
- Customer would possibly be removed from the program or have to true-up the costs of gas if consumption is outside of the tolerance level.
- Bill still varies based on cost of gas.
- Consumer education.
- Not all customers may qualify for the option (e.g. recently moved and insufficient information about usage patterns).

1.d) Supplier Choice – Partial Consumer Choice with Default Service Option

The customer under this option will have the opportunity but not the requirement to choose a supplier other than the LDC. Example: Customer can choose to purchase the commodity (natural gas) from supplier ABC instead of taking natural gas from the LDC. It is recommended that a pilot project be implemented in the state to give an LDC an opportunity to change its business practices, identify additional consumer education needs, and identify and address any problems before rolling out statewide to all small commercial and residential customers. Some of the "con" statements below pertain to issues that must be addressed if this option is selected.

Pros:

- Increased competition may drive-prices down.
- Multiple options may exist for choice of suppliers, firmness of service, limitation of volumes risk and commodity price risk.
- Possible pooling/aggregation of low income customers may be used to facilitate providing assistance.

Cons / Issues:

- Supply reliability – assuring that supplier has firm capacity to make firm delivery.
- Peak day reliability – assuring that supplier has adequate gas on utility system to meet gas consumption needs on an extremely cold day.
- Stranded costs issues must be addressed. What does the utility do with the excess pipeline capacity or excess in gas supply contracts that were previously held?
- Utility is supplier of last resort. What happens if supplier walks? Who has legal jurisdiction?
- Security or performance bond level determination.
- Billing issues must be addressed - Who provides the billing to the customer? (LDC? Supplier?) If LDC bills on behalf of supplier, communication is vital to assure accurate bill.
- Communications and consumer education.

- There is little margin at the residential/small commercial level, so there could potentially be few marketers participating especially if consumers are not able to aggregate loads. Want to avoid having marketers going only after customers with best load factors – cherry picking and leaving the rest for the LDC.
- System balancing. Ensuring receipts match deliveries.
- Minimal savings. Big hassle/complex in choosing appropriate supplier.
- Not a guarantee of savings.
- Cash out set equitably to assure no unfair detriment.
- Marketer qualifications to enter into program must be addressed.
- Local governments may lose significant tax revenues. If new or additional taxes are instituted to make up for lost revenues under gross receipts taxes, there could be possible problems due to the requirements of the Hancock Amendment in Missouri.
- Consumers could be inundated with aggressive and misleading marketing tactics, fraudulent practices such as slamming and improper billing practices.
- Low-income consumers may be left without affordable service.
- If marketers pursue customers with better load factors or better payment records the cost of natural gas for the remaining LDC customers may increase.
- Who represents the consumers in disputes over gas supply?
- Issues arising due to affiliated transactions by LDC marketing affiliates.

1.e) Supplier Choice –LDC Fully Exit the Merchant Function

Under this option, LDCs would no longer sell natural gas, but would be limited to providing distribution service only. This option would be similar to what happened with the pipelines under Federal Energy Regulatory Commission (FERC) Orders 436 and 636 in which the pipelines exited the merchant function and no longer provided sales service, but transportation only. The customer would purchase gas directly from a gas marketer. It is recommended that this type service should be offered on an optional limited, pilot type basis initially to give an LDC an opportunity to change its business practices, identify additional consumer education needs, and identify and address any problems before rolling out statewide to all small commercial and residential customers. This time would also benefit marketers who wish to get established. Some of the "con" statements below pertain to issues that must be addressed if this option is selected.

Pros:

- Customers have a choice of gas supplier and may receive benefits of competition.
- Prices may come down due to competition.
- More options for customers as to types of service - i.e. less than full firm.
- Can be part of additional unbundling of services by the LDC.
- From the LDC's perspective removes the risk and insufficient reward that LDCs face in providing commodity gas where no gas procurement incentive plan is in effect.
- From the LDC's perspective, reduced regulatory burden associated with gas supply and PGA issues.
- Possible pooling/aggregation of low income customers may be used to facilitate providing assistance

Cons / Issues:

- Significant consumer education is necessary.
- Consumer confusion - e.g. communication issues between them, the marketer and the LDC. Understanding of firm versus interruptible or less firm options and the various costs and risks associated with these.
- Supplier of last resort issues must be addressed. Who is it? Who pays?
- What is the LDCs obligation to serve in case of problems?
- What happens when a gas marketer defaults?
- How is the system balanced? Easier for LDCs with their own storage.
- Gas supplies or pipeline services used by a marketer may not in fact be firm.
- Stranded cost issues must be addressed. Winding down of all the supply and capacity commitments that an LDC has entered into. Possible stranded costs.
- Increased administrative burdens for LDC in dealing with multiple markets, multiple pools, aggregation and balancing issues. May require costly computer software changes.
- Local governments may lose significant tax revenues. If new or additional taxes are instituted to make up for lost revenues under gross receipts taxes, there could be possible problems due to the requirements of the Hancock Amendment in Missouri.
- Consumers could be inundated with aggressive and misleading marketing tactics, fraudulent practices such as slamming and improper billing practices.
- Prices may go up (e.g., Low income consumers may be left without affordable service).
- If marketers pursue customers with better load factors or better payment records the cost of natural gas for the remaining LDC customers may increase.
- Reliability – who assures/checks for adequate capacity for peak days?
- Increased administrative burdens for customers – e.g. may now be 2 bills for gas service, or the time involved in selecting a supplier.
- Who represents the consumers in disputes over gas supply?
- Issues arising due to affiliated transactions by LDC marketing affiliates.

1.f) State Takeover Gas Purchasing Function

Responsibility for procuring natural gas for customers of the State's ten LDCs currently resides with each individual LDC. These LDCs are served by a number of different interstate and intrastate pipelines and range in size from very small (less than 500 customers) to very large (more than 600,000 customers). This option would place the procurement and nomination function for the commodity (natural gas) under the jurisdiction of the state.

Under the current approach, each LDC makes its gas commodity purchases and undergoes an annual audit by the PSC staff. These audits may result in recommended disallowances (e.g., that not all gas commodity costs will be recovered) based on the Staff's allegations of imprudence. Very infrequently, LDCs have been permitted to earn financial profits on gas commodity transactions (e.g., the MGE incentive plan from 1996-1999 and the Laclede incentive plan from 1997-2000). In some cases there is substantial litigation (and ensuing judicial review) surrounding recommended imprudence disallowances as well as gas commodity incentive plans.

Pros:

- Economies of scale and increased buying power in performing the gas procurement function could lead to decreased procurement cost per Ccf of gas delivered.
- The aggregation of purchasing power may make financial hedging a more viable option than is presently the case for the State's smaller LDC systems, which may help bring price stability to those customers in a more cost-effective fashion.
- Eliminates the costly, time-consuming and repetitive administrative litigation process currently know as the Actual Cost Adjustment (ACA) review. This elimination of administrative litigation may generate cost savings.
- Maintain current standards of reliability.
- Maintain current PGA rate structures based on serving interstate pipelines.

Cons:

- Knowledge of each individual system's idiosyncrasies may be lost and may compromise reliability to some extent in the short term.
- Governmental administration of procurement activities may be less than nimble, which could result in increased costs.
- Transition could be complicated and may cause more questions than answers in terms of who ultimately will be responsible for gas control, interstate pipeline storage and transportation contracts, etc. As a result, personnel savings from consolidation of purchasing activities may be minimal.
- Gas costs for some LDC service areas could go down, but costs to others could go up.
- Whether government would be properly motivated to achieve most favorable gas procurement arrangements versus just meeting basic needs. May lead to government review of government activities, which could dilute the cost savings that may be possible by eliminating ACA review and litigation.

1.g) State Oversees Third Party Purchasing of Gas for State

Missouri's investor owned gas LDCs currently each rely mostly on the gas procurement departments located within each LDC or an affiliate of the LDC. Some of these gas procurement departments procure gas supplies for a service territory that is largely contiguous (e.g. Laclede) while others procure gas for geographically separate districts that make up their entire Missouri service territory (e.g. AmerenUE, ANG, MO Public Service, and MGE).

As an alternative to the current gas procurement process, the State could oversee a competitive bidding process where gas marketers (e.g. Williams, Enron, Dynegy, Aquila, and Shell) compete for the business opportunity of being designated at the statewide or regional level to be the gas supply procurer for all of Missouri's LDCs. The statewide gas procurer would have responsibility for the full range of gas procurement responsibilities including gas commodity procurement and associated hedging of commodity price and volumes risk, storage, and pipeline capacity reservation, nominations, and balancing. Individual LDCs could be allowed to "opt out" of the new gas procurement procedures but this would decrease
the potential benefits.

Pros

- Economies of scale and increased buying power in performing the gas procurement function could lead to decreased procurement cost per Ccf of gas delivered.
- Costs may decline as the utilization of gas supply assets and contracts is optimized on a statewide basis. For example, the projected peak day demand should be less than the sum of the projected peak day demands of all Missouri LDCs. Also, capacity release and off system sales revenues might be increased if the gas supply assets and contractual rights from several LDCs could be bundled and sold as a package.
- A concern is that current gas incentive plans use arbitrary incentive levels that may be considerably higher than the amount needed to incent beneficial gas procurement outcomes. If a competitive market exists for outsourcing the gas procurement function, then the costs of increased efficiency and cost effective procurement practices will be limited to the amount necessary to achieve desired outcomes. Missouri consumers may be able to enjoy significant savings if desired outcomes from the current incentive plans can be achieved at a fraction of the cost.
- Decreased costs of regulation, regulatory compliance, and litigation associated with gas procurement.

Cons

- A methodology would need to be devised for allocating gas procurement costs among LDCs. However, Missouri LDCs already have experience with allocating gas procurement costs (e.g. pipeline capacity and storage costs) among the geographically distinct districts that they serve.

- One Missouri utility has its own storage facility and some have propane peaking capabilities that would need to be incorporated into the statewide gas procurement. Missouri would be "breaking new ground" in initiating this process on a statewide basis so a certain amount of trial and error would likely be required as the new process is implemented.
-
- The State may not have personnel with the required skills to oversee this process.
- Knowledge of each individual system's idiosyncrasies may be lost and may compromise reliability to some extent in the short term.
- Transition could be complicated and may cause more questions than answers in terms of who ultimately will be responsible for gas control, interstate pipeline storage and transportation contracts, etc. As a result, personnel savings from consolidation of purchasing activities may be minimal.
- Gas costs for some LDC service areas could go down, but costs to others could go up.

Group 2 Option Papers: Alternate PGA Methods

2.a) How Missouri Does It Now

Description:
Regulated natural gas LDCs are currently permitted to change their PGA rates up to 3 times per year. Once in a winter filing that takes place in November, again in a summer filing that takes place in April, and last in an emergency or unscheduled filing when market conditions shift unexpectedly to the degree that they result in a relatively large under or over recovery balance. Generally, interest is paid by the utility for over recoveries and interest is paid by the consumers for under recoveries, outside of a bandwidth in recoveries. PGA rates in each of these filings are based on current market and near term future prices, fixed price contracts, storage withdrawal gas prices, and considers the percentages of supplies anticipated from each of these supply sources. Transportation contract costs, fuel losses, and any under or over recovery balances are also generally considered.

Pros:
This approach is a reasonable trade between having rates change more or less often than three times per year. Changing rates more often than three times per year complicates proration and customer rate expectation issues. Changing rates less often than three times per year further exaggerates PGA rate shifts when they do occur and further distorts customer rates vs. market conditions. The current approach was actually adopted as a result of the price spike in the 1996-97 winter. The price spikes of the 2000-01 winter combined with monthly PGA rate changes would have resulted in customers paying more for natural gas during the 2000-01 winter than they did under the current approach. Numerous people at the task force public meetings said they preferred rate stability. The total costs of natural gas to the utility would not have been any different but the recovery process would have resulted in more of these costs being collected during the winter if rates changed each month. Under the current approach, these balances will need to be collected over the summer and possibly, to some degree, the following winter. In defense of the PGA rate changes that occurred this winter, it must be noted that many factors resulted in a "perfect storm" scenario that drove rates dramatically higher throughout the country – not just in Missouri. Record cold weather, electrical generation demand for natural gas, an increased population, growing economy, flat supply growth, and lower than average storage levels all played a part in what happened. The current PGA process was not at the "heart" of what happened.

Cons:
This is the process that was in place during the 2000-01 winter. The average Missouri residential LDC customer saw their winter natural gas bill approximately double from what they paid one year ago while the market price of natural gas went up by more than a factor of four. The current process results in a significant lag between market price spikes and the associated adjustments to customer rates. This results in market signals to customers that are not consistent with actual market conditions. The under/over recovery balances required to trigger emergency PGA rate changes result in long payback periods that further distort rates to customers vs. what conditions exist in the market. Only permitting three changes in PGA rates per year can result in larger swings in rates than would otherwise occur with rates able to

change more than three times per year. The regulatory lag under the current approach, coupled with winters like the 2000-01 winter, result in significant under recoveries that result in consumers paying interest on what they did not pay for in the winter and result in higher natural gas costs throughout the summer. Consumers with high summer usage (i.e. laundry businesses and restaurants), end up paying more than their share of these high summer costs to collect winter under recoveries.

2.b) Changing Frequency of PGA Filing – More Frequently

Pros

- Filing more than 2-3 PGA changes each year would result in a smaller pool of gas costs, compared to the current formula, to be recovered over the succeeding months. In periods of moderate price changes, the rate charged to customers would generally be stable.
- Filing more frequent PGA filings would result in more immediate, but smaller rate changes. Under the current formula, in periods of substantial price changes, an increase or decrease in gas prices might not be passed on to customers for several months.
- Filing monthly PGA changes would bring Missouri into conformity with the PGA formulas used in most other Midwest states, including Iowa, Kansas, Minnesota and Michigan.

Cons

- Filing more frequent PGA changes would expose customers to price spikes. A substantial, short-term increase in gas prices would result in higher gas bills the succeeding months. The current system tends to average out such price spikes.

2.c) Changing Frequency of PGA Filing – Less Frequently

Pros

- In periods of changing natural gas prices, this system provides more stable rates for customers and is less work for all parties involved in the filing process.

Cons

- Filing fewer PGA changes each year would result in a larger pool of gas costs than under the current formula. In periods of changing gas prices, the financial impact on customers is delayed and it may take months to repay under recoveries.

2.d) Eliminating the PGA and Collecting in General Rates

Description:
LDCs currently recover the vast majority of their gas supply (gas and pipeline) costs through the provisions of standard statewide PGA clauses approved by the MoPSC. The administrative application of this cost recovery mechanism permits the LDC to make one scheduled summer and one scheduled winter PGA filing each year, and one unscheduled winter PGA filing when there are certain specified projections of over- or under-recoveries of gas supply costs. The reconciliation of LDCs' gas supply costs and the recovery of such costs from customers are reviewed in annual audits conducted by the MoPSC Staff for each LDC.

In most states (46 out of 50), commodity gas costs are recovered outside the forum of a general rate case through some form of PGA mechanism. PGA clauses, which grew rapidly in popularity after the 1973 oil price shock, were instituted to allow a gas utility to recover its commodity gas costs (plus, in many states, interstate pipeline costs) in a timely fashion that averts financial instability for LDCs. With gas supply and pipeline costs being approximately 65-80% of total LDC rates for natural gas, the use of PGA clauses avoids the deployment of additional LDC and regulatory commission resources that would be required to process a complete rate case.

The complete elimination of the PGA clause would, in effect, treat gas supply costs the same as all other LDC operating expenses, e.g. customer service labor, meter reading, billing, etc., which are allowed by the MoPSC to be included in the LDCs' base rates for natural gas service. This option would basically make the LDCs treat natural gas and pipeline costs, for ratemaking purposes, the same as electric utilities currently treat their variable fuel costs, which constitute approximately 30-35% of total electric operating revenues.

Pros:

The "pros" of adopting this option of eliminating the PGA clause from LDC tariffs are as follows:

- Using a rate case forum to establish rates for the recovery of gas supply costs would permit the MoPSC to review an LDC's entire operations and financial condition in establishing the LDC's total future rates for natural gas service. The MoPSC currently looks at all LDCs costs in establishing rates but does so through a process that considers gas costs separate from non-gas costs.
- Under an assumed rate case filing schedule of no more than once each year, the annual number of changes in the LDC gas cost recovery rate would be reduced from the current maximum of three per year. However, MoPSC rules still permit the LDCs to petition the MoPSC for emergency rate relief during current or projected periods of financial distress.
- Gas price volatility, and the risks associated therewith, will be transferred entirely to the LDC. While this will stabilize the rates for gas cost recovery for customers, it will not necessarily result in lower rates for customers as a result of the LDC's costs of managing this added risk.

- Customer bills may be simplified if the resulting LDC rates and billing format reflect a single combined rate for both gas supply and LDC gas distribution costs, instead of containing two separate rates or charges for these two components of cost.
- If a methodology could be developed for the determination of a "rolled-in" level of gas costs, to be included in an LDC's base rates for gas service, that is mutually acceptable to both LDCs and the MoPSC, LDCs could strive to earn profits on their gas supply procurement activities without the impending risk of a MoPSC prudence review.
- Gas supply incentive plans may no longer be necessary, if LDCs are allowed the opportunity to earn higher equity returns as compensation for the assumption of the higher risk of recovering all gas costs from a fixed price in its base rates, and the recovery of gas costs from LDC customers is no longer limited to an absolute dollar-for-dollar basis.

Cons:

The "cons" of adopting this option of eliminating the PGA clause from LDC tariffs are as follows:

- As gas supply costs constitute some 65-80% of total LDC rates for natural gas, a series of regulatory proceedings would be required for Missouri's LDCs, in order to initially establish an appropriate level of gas costs to be included in gas rates. It can be anticipated that, in such proceedings, there is a high chance of litigation.
- Due to the magnitude of LDC gas costs and the importance of their timely recovery to the financial condition of the LDCs, and the normal eleven month suspension period for processing rate cases, it can be anticipated the majority of the LDCs will likely make a "Holiday" rate case filing each year, in order to have their projected costs of gas supply, as well as all other increases in plant investment and operating expenses, incorporated into their base rates no later than the subsequent December 1st of each calendar year. More frequent rate cases will result in greater rate case expenses and these costs are generally borne by ratepayers.
- With the added financial risk of having a fixed level of gas costs embedded in LDC base rates, LDCs will likely attempt to limit such additional risks through the greater use of various financial instruments. While the use of such instruments may limit exposure to extreme gas prices during peak periods, their cost has the potential of increasing overall gas costs.
- The rate case approach to the recovery of the LDCs' significant level of gas costs will likely result in a roller coaster of much higher and more volatile profits or deficits for the LDCs, due to their assumption of the total risk of the variations in gas prices and weather occurrences. While this added risk to the LDCs generally provides justification for increased equity returns and increased overall gas rate levels, such risks could also result in LDC financial situations where their ability to maintain service to their customers becomes jeopardized or impaired.
- The rate case option also deprives, or shields, customers from the level of seasonal price signals associated with the recovery of gas costs under the PGA and will also likely result in shifting a larger portion of the recovery of gas supply costs between customer classes with different seasonal gas consumption patterns.

- While the rate case option of fixing a gas price as a part of the LDC's base rates would shield customers from significant price spikes in the wholesale gas markets, it also eliminates the customer's opportunity to participate in any steep decline in such prices by locking the customer into paying a set price for gas costs until the next LDC rate case.

2.e) PGA Rate Caps with Summer Recoveries

Description:
Regulated natural gas local distribution companies (LDCs) would have a "cap" set on their PGA rates. If the market for natural gas goes above this cap the PGA would not rise above the preset cap to reflect the market rise in natural gas prices for those volumes that the LDC bought at the higher market price. This would result in the LDC under-collecting for those volumes bought at the higher market price vs. what price was set in the PGA rate cap. This balance would be recovered in the summer when market prices would presumably be lower. No legislative action would be required to have this happen in the state of Missouri as described.

Pros:
Because of the potential volatility of the natural gas market, price spikes such as were common in the 2000-01 winter, can be mitigated to the consumer thus allowing for more accurate budgeting and cash flow needs. Also, there may not be as great a need for social service funds because this option allows for the natural spreading out of costs to the ultimate consumer. The mechanism could be used with the current PGA system or one that changes PGA rates more or less often.

Cons:
Studies will show that over the long run, this option actually costs consumers more due to the carrying costs of delayed recoveries of un-recovered gas costs. Rate caps have the impact of muffling price signals to consumers. The result of this muffling is that there is less conservation.
Consumers may not want price caps. In none of the presentations made, was consumer research presented on what the consumer is looking for in terms of price options. This option still does not give any incentive to the utility to minimize the overall price it pays for natural gas, as they would still have full recovery of gas costs. Deferring the recovery of un-recovered gas costs to the summer billing periods may inappropriately shift PGA gas costs from the customer classes for whom the winter gas costs were incurred to those customers with high or levelized year round gas usage in the summer periods.

2.f) PGA Rate Floors and Funding Price Stabilizing Funds

Description:
Regulated natural gas LDCs would have a "floor" set on their PGA rates. If the market for natural gas dropped below this floor, the PGA would not drop below the preset floor to reflect the market drop in natural gas prices for those volumes that the LDC bought at the lower market price. This would result in the LDC collecting an over recovery for those volumes bought at the lower market price vs. what price was set in the PGA rate floor. This balance could be used to perform a number of functions – depending on its magnitude. No legislative action would be required to have this happen in the state of Missouri as described. If these over recovery balances were targeted for low and/or fixed income customers – legislative action might be required to address inequities in treatment of customers in like situations. Consumer education would be necessary with this type of program to explain the PGA floor and avoid confusion.

Pros:
The winter of 2000-01 demonstrated that natural gas market prices can be extremely volatile and can reach levels that exceed what many of Missouri's LDC customers can pay. This mechanism would provide for a source of funding that would be of very minor impact to the typical LDC customer. This mechanism would also avoid unrealistic expectations of customers. Temporary price drops contribute to unrealistic customer expectations as to what natural gas rate is "average" and "reasonable". Not participating in these market drops to their full magnitude would help to fund price stabilizing funds and not contribute to unrealistic customer expectations. These price-stabilizing funds could be used directly to offset winter price spike cost or purchasing forms of "price insurance" like call options or weather derivatives. The mechanism could be used with the current PGA system or one that changes PGA rates more or less often.

Cons:
This would further contribute to an already administratively burdensome ACA process. No certainty would exist in the level of funding available from a program like this from year to year. Some years would result in large balances for price stabilization efforts and others would result in zero funding. This mechanism has some very real feast or famine funding issues that couldn't be predicted from year to year. Customers may become outraged that the utility is keeping a portion of market natural gas costs drops vs. PGA rates for any purpose, even the purpose of helping to stabilize future rates. How these funds would be addressed in the ACA process could be cumbersome and the LDC's prudence in how it spent these funds would be of concern. This is a type of pre-approved funding mechanism vs. reviewing costs and determining prudence after-the-fact through the current actual costs adjustment (ACA) audit process.

2.g) Alternate Recovery Mechanisms for Low and Fixed Income Customers, Developed Through the Regulatory Process

Description:
Low-income Americans (those earning less than the Federal poverty guidelines, see below) face severe challenges in meeting their housing requirements, including utility service. Low-income citizens spend about 20% of their income to purchase their basic home energy supplies for heat, hot water, lights, and appliances. This compares with 4% for middle and upper income customers. It was reported that during the cold winter months of this past winter, many low-income citizens spent more than 30% of their income on home heating costs. The consequences of this economic hardship include health and safety problems, children displaced from their homes because of the lack of utility service, senior citizens forced to sell their homes, and even homelessness. The National Fuel Funds Network reports that Missouri has $6.3 million in natural gas arrearages owed by 13,091 households. Current efforts to assist low-income citizens with utility bills include affordability programs, educational programs, and efficiency programs. Examples of these types of programs and some related statistics are attached.

One path toward implementation of this option could be the Missouri Legislature adopting legislation to establish a "low income" category of utility ratepayers, based on the federal poverty level guidelines. Establishing this rate class will enable further discussion of options to help low-income customers with their current energy cost burden, the economic advantages of this plan to the utility companies, and the appropriate designation of funds for weatherization of the homes of low-income customers. If such legislation is adopted, the "Cold Weather Rule" prohibiting disconnection of service during certain months may need to be modified to insure that a discounted service fee is paid by these customers in order to maintain service.

A number of options exist for how this new rate class could be treated:

Percentage of Income Plan to normalize the percentage of income paid for utilities across the utility customer base. Income would be verified by social service agencies on a quarterly or annual basis. LIHEAP funding available to these customers would be directly assigned to the utility company.

Percentage of Actual Bill Plan: Low-income customers would pay a pre-determined percentage of their actual bill for energy usage. Income would be verified by social service agencies on a quarterly basis. This option promotes conservation of energy use by the customer.

Customer Support for a Low-Income Fund: For a minor levee (up to a maximum amount of less than $2 per year), all residential customers in the non-low income rate category would support a fund to assist low-income customers.

Utility Company-Sponsored Assistance for Low-Income Customers: Companies would be required to support a low-income utility assistance fund from shareholders and/or corporate revenue (not supported by ratepayers).

Another task force on low-income customer programs could be developed to deal with just this issue while the legislature is considering the change in statute. This would give more time to examine all the aspects of these (and possibly) other low-income customer programs.

Pros of Low-Income Assistance Programs: Maintaining the utility service of the most vulnerable customers during the cold winter months and the hot summer months pays off in averting major health care costs, preventing unsafe home heating alternatives, such as kitchen stoves, candles, or space heaters, avoiding non-payment that forces families to move or illegally re-connect energy supplies, and encourages family and neighborhood stability. Low-income energy assistance programs reduce utility company uncollectables that would otherwise be borne by increased costs to all ratepayers. Maintaining utility service to low-income customers reduces the fixed costs of the company's disconnecting and reconnecting homes and customer service staff.

Cons of Low-Income Assistance Program: Paying utility company customers are involuntarily subsidizing those who do not pay their bills. Low-income customers are discouraged from meeting their financial obligation because they often cannot get assistance unless their service has been disconnected. Inflexible income guidelines prevent many working families from being eligible for utility assistance programs. Utility companies are providing a social service for which their employees are unqualified or otherwise unable to adequately administer. With limited funding, arbitrary decisions about who receives assistance are often unavoidable. Utility companies must rely on government or private social service payment of delinquent bills, which is sometimes not forthcoming in a timely manner.

2.h) Alternate Recovery Mechanisms for Low and Fixed Income Customers, Developed Through the Legislative Process

This is the same option as "2.g" above except low-income assistance programs would be developed through the Legislature and would likely involve increased LIHEAP funding and/or some sort of tax on the general public instead of just ratepayers.

Information Related to Options 2.g and 2.h:

150% of Poverty Guidelines: 2001 U.S. Department of Health and Human Services

Family Size	Monthly Income	Yearly Income
1	$ 1,073.75	$ 12,885.00
2	$ 1,451.25	$ 17,415.00
3	$ 1,828.75	$ 21,945.00
4	$ 2,206.25	$ 26,475.00
5	$ 2,583.75	$ 31,005.00
6	$ 2,961.25	$ 35,535.00
7	$ 3,338.75	$ 40,065.00
8	$ 3,716.25	$ 44,595.00

Categories of Low-Income Assistance Programs and Examples from Around the Country:

Affordability Programs:
LIHEAP (Low-Income Home Energy Assistance Program), a Federal program distributed through State governments to assist low-income customers.

ECIP (Emergency Crisis Intervention Program), a subsidiary of the LIHEAP program to assist those who face shut-off, senior citizens, and families with young children. These funds are available for home heating and cooling costs.

Customer Contribution Funds: Voluntary contributions from utility company customers usually added to the ratepayer's monthly bill and distributed through private social service agencies.

Involuntary Customer Contribution Funds: A standard addition to all customer bills to assist low-income customers.

Privately Donated Utility Funds: Donations to private assistance funds, usually administered by social service agencies or religious/charitable organizations.

Percentage of Income Plans: These plans insure that low-income customers do not pay a disproportionate percentage of their income on utility costs.

Education Programs:
Budgeting Classes: Usually conducted by Consumer Credit Counseling, universities, and utility companies.

Conservation Classes: Conducted by utility companies, weatherization programs, and universities to teach consumers to conserve energy. These efforts usually result in an approximate 10% reduction in utility costs.

Weatherization/Efficiency Programs:
Government Programs of the U.S. DOE, and U.S. Department of Housing and Urban Development encourage weatherization of existing homes (including insulation, window replacement – *not usually with federal funds*, furnace replacement, energy saving appliances, etc.) and energy-efficiency guidelines for new home construction. Energy saving of up to 40% can be realized through weatherization.

Private weatherization programs supported by utility companies. These programs' guidelines usually include credit worthiness and other customer requirements.

Examples of Effective Affordability Programs from other States
Ohio Percentage of Income Plan (PIP): A qualifying customer in Ohio pays the gas utility a fixed percentage of his/her income for utility service, regardless of usage. Some programs may require the consumer to make a monthly contribution on any arrearage. The Ohio PIP programs are individually administered by each gas utility and funded by mandatory contributions from the utilities' customers.

Kentucky Customer Assistance Program (CAP): This program, operated by a Kentucky gas utility, is funded by a mandatory contribution from residential customers. The customer funding is matched, dollar for dollar, by the company's shareholders. The funding is capped at 1.5 cents per Mcf or about $1.50 per customer per year. The program is administered by a local low-income advocacy organization.

Illinois "Hands-Up" Program: This program is a community/utility company partnership that allows customers to work off their utility bills at a rate of $10 per hour by providing labor for community needs or by attending certain classes.

Group 3 Option Papers: Price Mitigation Tools

Initial Comments Regarding the Scope of the Group 3 Options

This subgroup examined several means or mechanisms that may be used to mitigate large-scale swings in natural gas prices. Each mechanism may be desirable in certain circumstances, but each has unique risks and costs that require evaluation in each circumstance.

The subgroup reached a consensus regarding the overall strategy of employing various mechanisms to mitigate and control gas price volatility. Our sense was that LDCs in Missouri should be encouraged by all stakeholders to utilize various mitigation tools to balance market price risk with price stability. LDCs should be allowed to create a balanced portfolio of gas supply contacts with various price structures to reduce, but not eliminate, market sensitive pricing. Part of a balanced portfolio will be over market at times and this is necessary to dampen price volatility. It is also recognized that gas price stability, which is desired and valued by customers, may result in higher gas costs over the long-term due to the costs of hedging and fixed-price contracts.

This section of the task force report will address each of the mechanisms studied, provide a brief explanation of the mechanism, and provide pros and cons regarding the mechanism.

3.a) Price Mitigation Tools and Hedging Instruments[2]

There are various types of price mitigation/hedging tools that LDCs can utilize. Dependent upon the overall goal of the gas purchaser, certain tools may be more appropriate to use than other tools at a given time. It is the consensus of this subgroup that the following tools should be used together in an overall price mitigation strategy.

Fixed Price Contracts

Explanatory Discussion
Fixed Price Contracts are natural gas supply agreements in which the buyer locks in a specific price of gas from a seller for a fixed volume delivered in a future period. The contracted volume must be delivered by the seller and received by the buyer during the term of the contract so both sides of the transaction have volume certainty. As a result fixed price contracts are typically structured as baseload transactions.

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[2]By Scott Glaeser, Manager, Natural Gas Supply and Transportation, AmerenEnergy Fuels and Services Company, Affiliated Agent on behalf of AmerenUE. Mr. Glaeser is deeply involved in natural gas purchasing activities for AmerenUE and has experience in the use of various types of financial instruments employed in the natural gas industry.

A fixed price contract can also be performed in the financial markets with New York Mercantile Exchange (NYMEX) futures contracts or over-the-counter (OTC) swaps with a financial institution such as Bank of America or Morgan Stanley.

In a NYMEX futures contract, the buyer purchases a NYMEX futures contract (which is defined in multiples of 10,000 MMBtu) for a future period at a set price. When the buyer sells this contract back to the futures market to liquidate the position, the difference between the market price at liquidation and the contract price is settled as a cash flow from or to the buyer (depending upon the market price). This cash flow is used to offset a corresponding gain or loss (compared to market) on a physical gas supply transaction. The financial structure is similar for an OTC swap except it is performed with a specific seller and can be tailored to certain receipt points and pipelines to eliminate basis risk.

Pros:
Fixed price contracts eliminate future market volatility and provide complete certainty in the future price of gas under that transaction. NYMEX futures contracts allow greater flexibility than physical contracts (i.e., more liquid and transparent market) and also eliminate credit risk issues.

Cons:
Fixed price contracts force the buyer to establish a future price position that risks being above the actual cost of gas when that future period arrives. They also lock the buyer into a baseload volume commitment that is inflexible compared to the dynamic gas supply requirements of a LDC. The financial contracts also require margin call transactions that may become substantial during periods of market volatility.

Call Options

Explanatory Description
Call options are financial instruments that give the buyer the right *but not the obligation* to purchase a futures contract at a set price in a future period. A fixed payment or premium is paid to the seller of the call option (NYMEX or financial institution) based upon market volatility and the time period the option is active. For example, an option for August 2003 would be more expensive than an option for August 2001 due to the uncertainty of the longer time period, which is referred to as time decay. If the call option is "in the money" based upon the value of gas in the futures market, the buyer can "strike" on the option and take possession of the futures contract for liquidation. Call options can be structured into physical gas supply agreements to create a price ceiling or cap in a market-based contract. A premium is paid for the cap through a demand charge, which is the implied value of the call option plus other premiums for firm supply and operating flexibility.

Pros:
Call options create a fixed and known maximum ceiling price for gas in a future period for a specific contract volume. However, the buyer is not obligated to "strike" on the option, which enables volume flexibility. When call options are structured into physical gas supply agreements, they allow the buyer to participate in downward price movements while limiting the risk of price spikes. The premium for the option is the only financial obligation of the buyer, which eliminates the financial risks of market volatility encountered with futures contracts.

Cons:
The premium of call options can become a substantial cost that may overshadow the financial benefits of acquiring the option. The strike price and premium of call options is derived from the underlying futures market, which reduces their effectiveness during periods of high gas prices and market volatility. The time decay component of call option pricing makes it financially unattractive to purchase for extended future periods.

Collars

Explanatory Discussion
Collars are a combination of a call option purchase and a put option sale by a buyer to create a price ceiling in exchange for guaranteeing the seller a price floor. The premium paid by the buyer for the call option is offset by the payment received for selling the put option to the seller. When the put option sale revenue matches the call option premium, the collar has a net financial outlay of zero and is referred to as a "costless collar". Collars can be financial instruments from the NYMEX and OTC markets or can be structured into physical gas supply contracts.

Pros:
Collars create a fixed and known maximum ceiling price for gas in a future period for a specific contract volume with reduced or no cost to the buyer. They allow the buyer to participate in downward price movements, until the price floor is reached, while limiting the risk of price spikes within the range of the collar. The premium, if any, for the collar is the only financial obligation of the buyer, which eliminates the financial risks of market volatility encountered with futures contracts.

Cons:
Collars require a fixed volume commitment in future periods, which essentially limits their use to baseload gas supply contracts. The strike price and premium of call options and put options used to create a collar are derived from the underlying gas futures market. This reduces the effectiveness of collars during periods of high gas prices and market volatility. The time-decay component of call option and put option pricing make it financially unattractive to purchase for extended future periods.

3.b) Weather Derivatives

Explanatory Discussion
Weather derivatives represent a newly evolving market based upon trading weather-related financial risks between parties. A strike price or value per unit of weather is defined by two parties to initiate a transaction (i.e., $10,000 per Heating Degree Day deviation from normal for Chicago Illinois during the month of December 2001). Once the strike or value of the weather derivative is agreed by both parties, the weather derivative becomes a financial instrument and functions like a futures contract. Once the actual weather of the defined area is realized, the financial contract is settled between the parties with a payment obligation from one party to the other depending upon which side of the position they assumed.

Pros:
Weather derivatives enable any entity with weather-related financial risk to lay off this risk onto another party with opposite but equal weather-related risks. The weather derivatives can enable entities to control revenue or cost variations due to weather volatility. They are designed more for insulating corporate earnings from weather volatility than stabilizing PGA rates.

Cons:
Weather derivatives are an immature and illiquid market that can only be performed in the OTC markets (not traded on NYMEX). Weather derivatives are only useful when there is a strong and consistent correlation between weather and a defined financial risk to the company or customer. The market value of weather derivatives can be heavily influenced by recent weather events that may bias the value of the hedge.

3.c) Natural Gas Storage[3/]

Explanatory Discussion
Natural gas storage principally refers to depleted natural gas production fields or below-ground caverns possessing a geology that permits the injection and withdrawal of natural gas from those reservoirs. In some limited cases it may also refer to smaller above-ground facilities, but these are typically of limited capacity. Historically, subterranean storage fields were owned and operated by interstate pipelines and most major storage fields are still owned and operated by pipelines today. In some cases today, private parties and LDCs may also own and/or operate storage fields.

[3/]By James Busch and Stu Conrad. Mr. Busch is a member of the Missouri Public Counsel's technical staff and frequently investigates and prepares testimony for rate cases on the utilization of storage by local distribution companies. Mr. Conrad is an attorney in private practice in Kansas City and has extensive experience in representing natural gas transporters at the Missouri Public Service Commission and at the Federal Energy Regulatory Commission in issues including pipeline natural gas storage and storage-related transportation issues.

If owned by interstate pipelines, storage fields are considered part of plant in service for the pipeline and rates, terms and conditions of service for storage are regulated by the FERC. For third party storage fields, the FERC typically allows market-based rates that are set by the competitive market and not on cost-of-service rate making. LDC-owned storage fields may be regulated by state agencies that regulate the LDCs.

Pros:
The storing of natural gas by LDCs has two main objectives. The first objective is to have natural gas available during the winter heating months for their customers. The second main objective is that it provides a physical hedge against winter price spikes.

First, natural gas is used for a variety of reasons. Heating demand, industrial use, and electric power generation are some of the main uses for natural gas. Historically, natural gas usage would peak in the wintertime due to the increase in demand for residential heating. Since production facilities were not capable of producing excessive quantities of natural gas to meet the increased demand, storage fields were utilized to help meet this demand. This meant that LDCs could purchase natural gas in the summer, often referred to as the injection season, inject it into storage, and then withdraw it in the winter when it was needed most. Natural gas storage is limited in quantity. Currently, nationwide, there are just over 3.2 Tcf of natural gas storage facilities available for use by LDCs and other users of natural gas. This corresponds with an overall annual demand of natural gas of over 23 Tcf.

The second factor that storage is used for is as a physical hedge. A hedge can be defined as an attempted protection against adverse price movements. Usually, hedging is done using financial instruments such as futures or options that are addressed elsewhere in this section. Sometimes, a user may decide to physically hedge against price movements. This can be done in the natural gas industry by utilizing storage.

When used as a physical hedge, storage works like this: Historically, the price of natural gas has been lower in the summer than in the winter, due to the relative lack of demand. An LDC could purchase natural gas at lower prices in the summer, put the natural gas in storage, and then use it in the winter, thereby helping to mitigate the costs that customers could ultimately end up paying for natural gas and avoiding seasonal price spikes. The lower priced summer natural gas is physically purchased and injected into storage to help prevent price spikes on that portion of a LDC's demand.

There are other positive impacts of using storage. These include reliability of supply and flexibility of operations. Having stored natural gas helps insure natural gas will be available and gives LDCs flexibility in handling their supply portfolio. Storage also could be beneficial if other parties have too much natural gas and need to get rid of it. An LDC could purchase this excess natural gas at a reduced cost and inject it into storage until it is needed. Stored natural gas may also be cheaper to move to the city gate than natural gas that needs to be compressed and transported from well-head production areas.

Cons:

There are some negatives to using storage. One is the loss that occurs in the storage field. Natural gas can escape due to the condition of the reservoir. Losses can also occur during the injection or withdrawal of the natural gas into storage. This loss however is not in any sufficient amount to dissuade the use of storage. Also, there are costs to using storage. There are financial carrying costs of having to purchase the natural gas in the summer, store it, and then withdraw the gas in the following winter. Again, these costs pale in comparison to the positive aspects of using storage.

Consensus of Sub-Group Regarding Natural Gas Storage

The consensus of this subgroup was that the intelligent use of natural gas storage may be a significant tool used by the LDC to manage its natural gas costs. It may additionally enhance the reliability and security of the LDC's supply.

3.d) Outsourcing/Agency Agreements[4/]

Explanatory Description.
Outsourcing can be described as an agreement where a third party, such as a marketer, takes over the entire gas supply function of an LDC. This can include operation of gas supply, transportation, and storage assets. Outsourcing could entail the use of a request for proposal or competitive bidding process to choose the contractor.

Pros:
The marketer's operations are typically national in scope, often having a presence in many different states. The marketer could have a broader knowledge of the industry or particular opportunities not known to the LDC. Smaller companies, such as small municipal systems may not have the resources to handle all the facets of obtaining natural gas supply and transportation. Outsourcing offers economies of scale in purchasing. Since a marketer probably would be operating in many different geographical regions, there may be savings due to the diversity of demands in the marketer's portfolio.

Cons:
Disclosure of contracting information becomes an issue because the marketer may not be subject to disclosing aspects of its gas portfolio. Since a large portion of the responsibility for procuring gas supply has been passed on to the marketer, there may be some weakening of the general obligations of the LDC regarding adequacy of gas supply. There could be a loss in experience away from the LDC as key gas supply personnel leave the company. There is a certain loss of control of key assets of the LDC, including storage, gas supply, and transportation. There is a lack of continuity with the various changes in management of the gas supply assets. Reliability may be adversely affected because of the unknown reliance on the flexibility of other jurisdictions, or the possible defaulting by the third party. There may be an incentive to compromise reliability for profit.

Consensus of the Subgroup Regarding Outsourcing and Agency Agreements
The subgroup believes that the outsourcing option might be more viable and efficient from a small LDC's perspective because of the limited resources usually available to handle all aspects of the gas procurement function.

[4/]By David Sommerer, Task Force Group 3. Mr. Sommerer is a member of the Staff of the Missouri Public Service Commission and actively involved in the investigation and review of purchased gas costs and contracts by local distribution companies.

Group 4 Option Papers: Incentive/Performance Plans

I. Summary Statement of Group 4

Group 4 was responsible for evaluating various options relating to the use of targeted incentive plans, performance based rate-making and other measures, as alternatives or supplements to the current gas cost recovery process and as a method for encouraging energy efficiency. Although the group was unable to reach a consensus on any specific plan or procedure, it did reach general agreement on four broad principles that were submitted to the task force for its consideration. The items that the task force was asked to vote on included the following:

4.a) Targeted incentive programs that are properly structured in accordance with the principles set forth on pages 50 through 57 of this subsection of the task force report should be utilized in the gas cost area;

4.b) Performance Based Regulation (PBR), with rate or bill caps, as described on pages 46 through 50 of this subsection of the task force report, should not be implemented in the gas cost area at this time;

4.c) The Commission should pursue incentive measures for encouraging energy efficiency that make financial sense for the utility and the consumer;

4.d) An expanded exchange of information by LDCs with Staff and OPC relating to procurement plans and strategies should be pursued in an effort to reduce disincentives in the gas cost area.

Group 4 also attempted to describe, and enumerate the pros and cons of, various alternatives that have been implemented, proposed or considered in each of these areas. (See Section VII for a discussion of targeted incentive plans, Section V for a discussion of PBR mechanisms, Section VII (2) for a discussion of energy efficiency incentive mechanisms, and Section VIII for discussion of one proposal for expanding the exchange of information in the gas cost recovery process). Once again, however, it should be emphasized that the group did not reach a consensus on the merits of any of the specific approaches or plans outlined in these sections and did not ask the task force to endorse any specific approach.

II. Introduction

Public utilities have historically been considered "natural monopolies" that, through large-scale production, can achieve greater efficiencies and lower per unit cost than firms in most other industries. For society to gain from these efficiencies and at the same time to protect against the potential abuses associated with monopoly power, public utilities traditionally have been regulated under rate of return (ROR) regulation combined with an obligation to serve in an exclusive service territory. In this way, rate of return regulation acts as a surrogate for competition and also allows the public utility to achieve financial integrity.

The proponents of rate of return regulation suggest that it simulates competitive outcomes to promote efficiency in the product market and promotes the social goal of ubiquitously available service at just and reasonable rates. Specifically, they argue that under traditional rate of return regulation:

(a) shareholders, through the efficient operation of the firm, are offered the opportunity to earn a reasonable return on prudently incurred investments based on normalized historic performance;

(b) increased efficiencies and innovation are encouraged by allowing firms to retain any profits associated with such advances that occur between rate reviews; and

(c) consumer welfare is maximized by the guaranteed availability of essential services (heating, cooling, lighting, etc.), lower price levels attributable to lower cost, and restraints on the monopolist's ability to exercise market power.

The critics of rate of return regulation argue that, under some circumstances, rate of return regulation suffers from weaknesses that diminish its ability to simulate beneficial competitive effects. Specifically, they contend that under traditional rate of return regulation:

(a) firms are less likely to accept potentially cost reducing risk or pursue innovation because costs are not pre-approved and must be incurred prior to a determination of the prudence of allowing recovery of those costs on an ongoing basis;

(b) firms are less likely to maximize savings and revenues because the frequent rebasing of rates based on historical revenue and expense levels prevents the firm from realizing any longer-term financial benefit from such activities; and

(c) firms tend to devote an excessive amount of their resources to explaining, documenting, and defending their activities to regulators -- resources that could be more productively used to achieve additional efficiencies in the management of their assets. Instead, they suggest that alternative forms of performance-based regulation or additional monetary incentives targeted at enhancing efficiency gains would be more effective in achieving desirable outcomes for consumers and society.

III. Overview

The primary focus of this section of the task force's report is to explore the pros and cons of alternative regulatory and incentive structures in an effort to identify meaningful methods to minimize the cost of natural gas to Missouri consumers and to promote more efficient use of this limited natural resource.

Section IV provides a brief history of developments in the natural gas industry and identifies areas of contention regarding the current PGA/ACA process.

Section V explores performance-based regulation (PBR) as a regulatory alternative to rate of return regulation. Rather than frequent reviews of utility costs and rates set to reimburse utilities for prudently incurred costs, PBR takes a long-term, goal-oriented approach to the utility's performance.

While in a broader sense ROR and PBR are methodologies for the determination of rates, targeted incentives offer an alternative for promoting superior efficiencies or specific goals such as energy efficiency.

Section VI provides a recommended set of parameters for the structure of incentives.

Section VII provides an overview of gas purchasing related incentives currently used by Missouri's LDCs. It also examines the pros and cons of those incentive mechanisms and describes existing and possible incentives targeted at improving demand side energy efficiency.

Section VIII addresses the significance of information and verification to issues of regulatory oversight of gas purchasing, consumer protection, and incentive design. This Section also addresses the task force's proposal for an integrated gas-purchasing plan.

Option 4.a) INCENTIVE/PERFORMANCE BASED MECHANISMS WITH SYMMETRICAL REWARDS AND PENALITES, POSSIBLY WITH VOLATILITY PROVISIONS

IV. Risk, Incentives and Disincentives of the PGA/ACA Process

As discussed in the task force report, the Commission adopted the PGA/ACA process in 1962. It fundamentally changed the traditional regulatory treatment for costs incurred by natural gas utilities. While some costs remained subject to the traditional method of rate of return regulation, under the PGA/ACA process LDCs could pass through to customers, dollar-for-dollar, the prudently incurred wholesale cost of natural gas adjusted for any price mitigation measures. Like traditional rate of return regulation, the PGA/ACA process was criticized as a mechanism that provides disincentives for LDCs to assume sufficient risk to secure lower gas related costs.

The natural gas operations of an LDC fall into an annual cycle. Typically, an LDC will inject natural gas into storage from April through October to bolster the supply of natural gas available during the heating season months of November through March. LDCs and natural gas pipelines need storage gas to supplement the gas available from the natural gas wells in the winter. The storage gas also serves as a physical hedge of lower summer prices against higher winter prices. The carrying costs of buying, transporting, and storing natural gas for periods of up to nine or ten months before use are recovered by estimating those costs in a general rate case and providing for cost recovery through base rates. The cost of the actual gas, transportation, and storage is recovered through the PGA/ACA process. The current PGA/ACA process was developed in an era when the source of natural gas supply was entirely regulated by the federal government. The LDCs bought gas for their entire needs and delivered it to their local systems at a price regulated by the Federal Power Commission, now the FERC. Under these circumstances, there was little room for disagreement about the source of gas supply or its cost in the PGA/ACA process.

In 1978, in the face of national natural gas shortages, Congress began the process to deregulate the price of natural gas. Throughout the 1980s and early 1990s, the movement progressed by fits and starts as the FERC grappled with implementing changes and dealing with market reactions to its orders. By late 1993, the price of natural gas at the wellhead had been completely deregulated. Interstate pipeline companies were converted to common carriers of natural gas with no merchant function, that is, pipelines no longer bought gas in the field areas and sold gas to LDCs. This process is usually referenced as "unbundling". Until the natural gas season of 2000-01, natural gas prices remained relatively stable in the range of $1.75 to $2.25/Mcf with occasional short spikes.

The advent of markets for natural gas, transportation, and storage required LDCs to make choices with consequences to both reliability and price. These price and reliability risks are affected by many factors, including variations in the weather. Warmer than normal weather reduces the volumes of natural gas needed, exposing LDCs to the consequences of excess capacity. Colder than normal weather often both drives up gas prices and causes increased consumption that exposes the LDCs and their customers to the vagaries of the spot market. Prior to unbundling, the LDCs faced only limited exposure to after-the-fact reviews of these factors because they were essentially captive to the FERC-regulated pipelines and prices. After unbundling, the LDCs each year face the consequences of market movements in gas costs that can dwarf their annual non-gas income and approach the levels of the net worth of the company. Minimizing these risks becomes a critical factor; it is only natural that LDCs seek to shift that market risk either to customers or regulators. The consequences of this market risk have increased dramatically for all players with the jump in natural gas prices to historical highs in the 2000-01 winter heating season.

An issue primary to the discussion of disincentives and risk is the pre-approval of costs. Some LDCs suggest that pre-approval would, under various circumstances, have positive results for consumers. For example, it might encourage the LDC to take favorable hedging and other actions that it might otherwise avoid because of concerns over prudence disallowances. Moreover, they suggest that if the actions for which pre-approval are sought are sufficiently flexible (for example, a range of potential actions rather than a single, pre-determined action is approved), much of the risk disincentives can be potentially avoided while still minimizing the amount of regulatory involvement in day-to-day management decision.

Regulators and consumer advocates also face disincentives with respect to pre-approval in the new natural gas marketplace. While LDCs press the Staff, OPC, and the Commission to pre-approve gas price levels or hedging strategies in an effort to shed market risk, regulators and consumer advocates do not feel that they have full and immediate access to all of the private information driving the LDC's gas purchasing decisions. By granting pre-approval to specific market prices or strategies, absent a comprehensive review of all relevant information they may be inappropriately sanctioning actions that could later prove detrimental to consumers if ultimately there were adverse changes in the price of natural gas. The result of this controversy is that attempts to gain regulatory approval for changes to pre-approved levels may be met with delays while regulators gather and analyze the provided market data.

Furthermore, to compound the increased risk noted above, LDCs now must take a far more active role in securing the natural gas needed by customers. LDCs now must actively seek and analyze the costs and reliability of gas supply and transportation. Yet under the traditional regulatory compact they are entitled to no return for their efforts in these areas. Particularly when compared to natural gas producers and marketers who have a strong profit motive for similar efforts, the lack of any potential for earnings may pose a disincentive to regulated LDCs.

Prior to implementation of the PGA/ ACA process, gas costs were considered together with non-gas cost in traditional rate of return proceedings. This provided a strong, albeit contentious, incentive for LDCs to minimize gas costs. Under the direct pass through environment afforded by the PGA/ACA, most of the risk of market volatility was shifted from the LDC to consumers. In exchange, however, any benefits resulting from cost reductions relative to the wholesale cost of gas also flowed directly through to consumers diminishing any efficiency incentives afforded by permitting the LDC to retain a portion of the financial benefits produced. While some would argue that the LDCs conceded financial gains from gas procurement in order to shed the risk of market volatility; others would argue that the lack of a financial incentives pose a barrier to encouraging LDCs to assume additional risk in pursuing cost reductions.

Proponents of gas cost incentives suggest that the introduction of incentive-sharing arrangements as a supplement to the current structure can replicate at least a portion of the cost reducing incentives that existed in the rate case environment. However, critics point out that providing additional incentives to the LDC outside the scope of a rate review may alter the LDC's objectives concerning risk if there is not reasonable assurance that the savings achieved will exceed the incentive premium paid to the LDC and any additional expenses related to the operation of the incentive program.

In summary, the current gas cost recovery system - the PGA/ACA process with or without incentives – provides disincentives for any of the parties involved to shoulder the risk of natural gas price movements. This is a factor that can have a favorable or unfavorable impact on consumers depending on where prices go. While the task force recognizes that it is not likely that these disincentives can be eliminated entirely, they should be explicitly recognized and addressed as best they can. Additionally, while allowing monetary incentives outside the scrutiny of a rate review may lead to additional efficiencies it also poses additional risk to consumers.

Option 4.b) PERFORMANCE BASED REGULATION (PBR) IN THE FORM OF RATE OR BILL CAPS

V. Performance Based Regulation (PBR)

As it is usually envisioned, PBR is actually a form of cost-based regulation. The difference is that standard cost-based, or rate of return, regulation seeks to ascertain the cost of service more precisely and then set rates at levels approximating that cost. In other words, a "tighter"

relationship exists between rates and actual costs. PBR, on the other hand, envisions a somewhat "looser" relationship over time, with the potential difference between rates and actual cost acting as an incentive for better performance. In a well-designed PBR, good performance in meeting the goals set out by regulators should lead to higher profits. Poor performance should lead to lower profits.

PBR usually involves some sort of price (or revenue) adjustment formula. The initial year's level is based on cost. Each subsequent year's price (or revenue) is determined by the previous year's level, as adjusted to reflect some exogenous (but relevant) general price change. In some cases, earnings sharing mechanisms, rebasing and off-ramps may be used to ensure that prices do not diverge too much from costs.

Price cap regulation is an example of PBR that has been used extensively as an alternative to rate of return regulation in the area of telecommunications. While it is too early to say whether PBR will emerge as the primary alternative to traditional rate-making for natural gas LDCs, it is not too early to expand our thinking about what PBRs are and what it takes to do them and do them well.

Creating or evaluating a PBR consists of three basic steps:

1) Identify the goals
2) Get the structure right
3) Get the numbers right

1) Identify the Goals. The first step of any successful PBR is to identify the goals to be achieved for the LDC and the consumer. These might include:

Cost cutting- Regulators can substantially increase the incentives for utilities to reduce their costs, with a significant portion of the savings passed through to customers.

Streamlining regulation- Simplifying the regulatory process allows utility management to turn its full attention to improved performance in all areas of its business and away from managing regulatory relationships.

Restructuring risk exposure-In many cases, there is a wide difference between utility management's perception of a risk and the actual financial consequences resulting from a decision. Management may worry whether cost will be disallowed as imprudent. Customers, on the other hand, rarely care whether a decision is prudent as long as it turns out to be smart. PBRs can allow a more thoughtful allocation of risk between utilities and customers.

Insuring good non-financial performance- PBRs can meet non-financial performance goals, such as energy efficiency programs that result in a decrease in energy consumption and sales, achieving an acceptable level of reliability and providing strong and effective customer service.

2) Get the Structure Right. The structure of a PBR defines the incentives that a PBR produces. Once the goals are set a PBR structure can be created to focus on those goals. For example, one of the major choices (discussed more fully below) is whether a structure should be centered on fuel prices or utility bills. Proponents of PBR suggest that a structure focused on prices produces powerful incentives to cut costs, increase sales and reduce cost-effective energy efficiency. As an alternative, they suggest that structuring the PBR around bills, on the other hand, does not diminish the incentive to cut costs but creates an incentive for cost-effective energy efficiency.

3) Get the Numbers Right. Even if the structure is right, if the numbers are wrong, there is a good chance that customer bills will be unreasonably high or utilities' financial health will be threatened. The right PBR structure, for example, might be $X per customer plus inflation minus productivity. Getting the numbers right means starting with the right "X" and using the right inflation index and productivity factor.

Pros

- PBR can provide opportunities to align the interests of utilities and consumers to advance energy policies that are in the public interest. It is not by chance that the PBR discussion is occurring amid the debate over increased competition in the utility industries, both gas and electric.
- The PBR route gives regulators the responsibility and the opportunity to define objectives for the industry. This can set the groundwork for just what is expected in a more competitive environment and can provide a vehicle to articulate what, in addition to low-cost energy services, is important for the industry to provide customers.
- Even in the absence of competition, PBR may offer a simpler and speedier regulatory process; one that emphasizes measurable results and does not depend on the myriad of inputs needed to conduct a full cost-of-service study.
- PBR provides an incentive to cut costs. Fuel adjustment clauses or PGAs, on the other hand which, for the most part, allow utilities to recover every dollar they spend on fuel or natural gas may leave the utility with less incentive to control costs.

Cons

- Getting the structure right will require trial and possible error. Regulatory oversight should remain intact to ensure that consumers are not in a worse position after PBR than they were before.
- Implementing PBR often turns out to be more difficult than expected, because stakeholders disagree on elements of the adjustment formula and protective measures. Getting the numbers right might prove to be very difficult.
- Absent a rate case conducted prior to implementation of a PBR, LDCs could receive a windfall at the expense of customers.

Bill Cap Versus Rate Cap

A carefully designed PBR can create mechanisms to achieve non-financial goals, including energy efficiency. Bill caps and rate caps, however, produce very different incentives.

Rate caps or "price caps" are already in use in Missouri. The three largest local exchange telephone companies Southwestern Bell, Verizon and Sprint are currently regulated under a price cap mechanism. Bill caps are not currently utilized in Missouri.

A simple bill cap PBR can be determined in the following manner:

In a rate case which looks at the usual cost items and customers served, an allowed base revenue per customer (RPC) is set at a reasonable level. This level, with certain adjustments, remains in place for a number of years, thus stretching out the regulatory lag period. Once a year, the RPC is adjusted by setting a growth rate. The simplest approach allows a growth rate based on some broad inflation measure, less adjustment for productivity improvements.

One example would be to let the RPC rise by the annual change in the Consumer Price Index less two percent for productivity improvements. Other approaches might base the increase on the change in other utilities' costs. The utility may also be allowed to directly pass through certain costs, typically referred to as "exclusions" or "Z-factors." These costs are generally desirable expenditures and/or outside the utility's control. An example might be the costs of demand side management (DSM). Adjustments can be made to accommodate changes in customer usage. For example, to the extent customer use under a cap falls (rises) outside a specified range, there would be a rebate (surcharge).

By following these steps, the net effect is that the utility will have a specified amount of money to serve customers' needs. If they spend less, their profits rise, but profit will hinge on cost control, not customer usage. This reduces the disincentive for DSM and increases the incentive for efficiency improvements. While proponents argue that rate caps provide strong incentives to cut per-unit costs, they may also provide utilities with very powerful incentives to promote energy use and equally strong disincentives to efficiency or demand side management (DSM). This tendency toward pro-sales and anti-DSM is a bias similar to that produced by a rate of return regulatory structure, under which a LDC can profit from increased sales volumes. However, if rate caps are reviewed and adjusted less frequently than a traditional rate case would otherwise occur, the window of opportunity for profit under rate caps, and in turn the disincentive to promote demand reductions, would be even greater than that produced by traditional rate of return regulation.