STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

TRANSCRIPT OF PROCEEDINGS

Hearing

May 12, 2002
Jefferson City, Missouri
Volume 2

In the Matter of Missouri Gas Energy's Purchased Gas Adjustment Tariff Revisions to be Reviewed in its 2000-2001 Actual Cost adjustment.	)	Case No. GR-2001-382
In the Matter of Missouri Gas Energy's Purchased Gas Cost Adjustment Factors to be Reviewed in its 1999-2000 Actual Cost Adjustment.	)	Case No. GR-2000-425
In the Matter of Missouri Gas Energy's Purchased Gas Cost Adjustment Factors to be Reviewed in its 1998-1999 Actual Cost Adjustment.	)	Case No. GR-99-304
In the Matter of Missouri Gas Energy's Purchased Gas Cost Adjustment Tariff Revisions to be Reviewed in its 1997-1998 Actual Cost Adjustment.	)	Case No. GR-98-167

MORRIS L. WOODRUFF, Presiding,
SENIOR REGULATORY LAW JUDGE.

CONNIE MURRAY,
STEVE GAW,
BRYAN FORBIS,
COMMISSIONERS.

REPORTED BY:

KELLENE K. FEDDERSEN, CSR, RPR
ASSOCIATED COURT REPORTERS

APPEARANCES:

GARY W. DUFFY, Attorney at Law
Brydon, Swearengen & England, P.C.
312 East Capitol
P.O. Box 456
Jefferson City, Missouri 65102-0456
(573)635-7166

ROB HACK, Attorney at Law
3420 Broadway
Kansas City, MO 64111

FOR: Missouri Gas Energy.

JEFFREY A. KEEVIL, Attorney at Law
Stewart & Keevil
1001 Cherry Street, Suite 302
Columbia, Missouri 65201
(573)499-0635

FOR: Riverside Pipeline Company, L.P.
Mid-Kansas Partnership
Kansas Pipeline Company.

JAMES DEUTSCH, Attorney at Law
Blitz, Bardgett & Deutsch
308 East High Street, Suite 301
Jefferson City, MO 65101-3237
(573)634-2500

FOR: City of Joplin.

DOUGLAS E. MICHEEL, Senior Public Counsel
P.O. Box 7800
Jefferson City, Missouri 65102-780
(573)751-4857

FOR: Office of the Public Counsel
and the Public.

THOMAS R. SCHWARZ, JR., Deputy General Counsel
BOB BERLIN, Assistant General Counsel
P.O. Box 360
Jefferson City, Missouri 65102
(573)751-3234

FOR: Staff of the Missouri Public
Service Commission.

P R O C E E D I N G S

JUDGE WOODRUFF: Come to order, please. This is Case No. GR-2001-382, which is a consolidated case which also includes GR-2000-425, GR-99-304 and GR-98-167, and concerns Missouri Gas Energy's purchased gas adjustment tariff provisions for its actual cost adjustments for 1997 through 2001.

And we'll begin this morning by taking entries of appearance, beginning with Staff.

MR. SCHWARZ: Good morning. My name is Tim Schwarz. I am Deputy General Counsel with the Public Service Commission. Appearing with me today will be Bob Berlin, also of the General Counsel's Office. We represent the Staff of the Commission. Our address is P.O. Box 360, Jefferson City, Missouri 65102.

JUDGE WOODRUFF: Thank you. And for Missouri Gas Energy?

MR. DUFFY: For Missouri Gas Energy, Gary Duffy of the law firm Brydon, Swearengen & England, and Rob Hack of Missouri Gas Energy, and we have submitted our addresses on the written entry.

JUDGE WOODRUFF: Thank you. And for the Public Counsel?

MR. MICHEEL: Douglas E. Micheel, appearing on behalf of the Office of the Public Counsel and the Public, P.O. Box 7800, Jefferson City, Missouri 65102-7800.

JUDGE WOODRUFF: For Riverside Pipeline, Mid-Kansas Partnership, and Kansas Pipeline Company?

MR. KEEVIL: Jeff A. Keevil of the law firm of Stewart & Keevil, LLC, 1001 Cherry Street, Suite 302, Columbia, Missouri 65201.

And, Judge, if I could, there may be -- not guaranteeing that there will be, but there may be times that I may or may not have an interest in certain things that are transpiring in the course of the case, and I was just wondering if I could ask for standing leave to be excused in the event such situation did arise?

JUDGE WOODRUFF: You can certainly use your own discretion as to when you're here. Of course, if you're not here, you're waiving any right you have to cross-examine and so forth.

City of Joplin? Mr. Deutsch, I believe, was their counsel. I don't see him in the room today. Was anyone else here for City of Joplin?

(No response.)

JUDGE WOODRUFF: Okay. We'll note his absence at this time and deal with him if he comes in later. All right. I don't believe there's any other parties. We'll begin in a moment by taking opening statements from the parties.

Yes?

MR. SCHWARZ: Do you want to premark exhibits?

JUDGE WOODRUFF: We will premark exhibits. You're jumping ahead of me.

MR. SCHWARZ: I'm sorry.

JUDGE WOODRUFF: I was going to say, we'll premark exhibits before that, and we'll take a short break and I'll go up and get the Commissioners.

There was one other matter. City of Joplin filed a motion on last Friday indicating -- requesting leave to file their statement of position out of time. Does anyone have any objection to that motion?

(No response.)

JUDGE WOODRUFF: Hearing none, that motion will be granted.

All right. We'll go off the record at this time to mark exhibits. I'll leave the Internet broadcasting while we're doing that.

(AN OFF-THE-RECORD DISCUSSION WAS HELD.)

(EXHIBIT NOS. 1 THROUGH 16 WERE MARKED FOR IDENTIFICATION BY THE REPORTER.)

JUDGE WOODRUFF: At this time we'll take a break while I go upstairs and get the Commissioners. We'll come back at 8:55. Thank you.

(A BREAK WAS TAKEN.)

JUDGE WOODRUFF: We're broadcasting again. Let's go ahead and go back on the record. Please be seated. And we're ready to begin with opening statements. I propose to have MGE go -- excuse me.

MR. SCHWARZ: As a preliminary matter, in its position statement on the first issue, Staff at the bottom of page 1 and carrying over to page 2 noted other pipelines that serve Missouri Gas Energy, and I'd want to make clear that Staff's adjustment relates only to the Williams Pipeline. Staff did not provide any testimony on and does not have any analysis of possible releases on either Panhandle or Kinder Morgan/Pony Express.

I just thought I'd like to get that clear from the beginning.

JUDGE WOODRUFF: I see that Mr. Deutsch has arrived, if you'd like to enter your appearance, sir.

MR. DEUTSCH: Yeah. Jim Deutsch, 308 East High Street, Jefferson City, Missouri 65101, with the law firm of Blitz, Bardgett & Deutsch, and I'm here representing the City of Joplin, Missouri.

JUDGE WOODRUFF: Thank you, sir.

Then on to opening statements. And I propose to have MGE go first, followed by Public Counsel, KPC, City of Joplin and Staff. Is that acceptable to everyone?

(No response.)

JUDGE WOODRUFF: Then beginning with MGE.

MR. DUFFY: Good morning. My name is Gary Duffy. I'm representing Missouri Gas Energy this morning. This case is an ACA or actual cost adjustment proceeding examining Missouri Gas Energy's gas costs. Technically we have four cases examining four periods, but the issues you're going to be hearing this week are only for one of those four years; that's July 1, 2000 through June 30, 2001.

We're here because the Staff has made a number of proposed adjustments, disallowances with which Missouri Gas Energy does not agree. Those proposed disallowances total almost $10 million.

There were four issues filed as a part of the issues list. What the issues list does not reflect, however, is that there's another issue for which the Staff has proposed a substantial disallowance, which I'd like to address just briefly, just to put things in the context and to explain why we're not addressing it this week.

That issue involves what's generally referred to as the Mid-Kansas Riverside adjustment, and the Staff has proposed disallowances in each of those four ACA periods. That issue involves the same allegations the Staff -- the Staff made and the Commission examined previously in GR-96-450, which was tried in November of 2001. And if you'll recall, you found the Staff had not produced sufficient evidence to support those adjustments and you issued an Order in this case.

The Mid-Kansas Riverside Company, however, has taken an appeal regarding your decision, specifically on the issue of the effect of the stipulation in that case. That case is now in circuit court.

In this case, in these series of cases, you've issued an Order which essentially has bifurcated or separated that issue out of the rest of the issues in this case. So the pipeline, I think, is rightly concerned about what the effect of that stipulation is, because it could mean having to litigate those issues every year through 2009, but we're -- even though those issues are technically in this case, they'll not be addressed in this hearing, pursuant to your earlier orders in this case.

We are here, however, to address the four issues that show up on the issues list. Issue No. 1, incidentally, concerns Kansas Pipeline Company also, but it's different substantially from what you've seen before, and I think it's on a topic that the Commission has not ever experienced before in litigation. The issue is capacity release.

Missouri Gas Energy ships natural gas over four different pipelines to serve the needs of its customers in western Missouri. One of those pipelines is Kansas

Pipeline Company, what we've been calling it. I think they're now Enbridge Pipelines, but it's the same pipeline. The evidence will show that MGE made an economic decision not to flow gas on that pipeline in the summer months of 2000 when they do not experience sufficient demand from their customers to need that gas.

The Staff has not challenged the decision of MGE not to flow gas on that pipeline. Instead, the Staff alleges that MGE was imprudent because it did not offer to rent or sell its idle capacity on that pipeline to someone else for that summer. The Staff, the evidence will show, has made a hypothetical calculation which assumes that if that capacity had been offered, someone would have bought it.

The Staff also assumed a price at which that capacity would have been rented or bought. The Staff alleges that $858,158 in revenue could have been generated from such a posting and sale or rental transaction and, therefore, the Staff proposes to make MGE pay its ratepayers that amount, $858,158.

The evidence will clearly show that MGE did not offer that capacity for sale or rent because it knew there was no market for it. It would have been a useless act to even post it on the pipeline's electronic bulletin board and say, hey, we have this capacity, does anybody want to buy it? That's because the evidence will show that there were no capacity releases at all on this pipeline during the 2000-2001 ACA period or in any prior period since it became an interstate pipeline, which was in about 1998.

The evidence will show that MGE is not the only shipper on that pipeline, and that MGE was aware that no one else has been able to release capacity on that pipeline by posting it on the electronic bulletin board.

Now, the evidence will show that once MGE became aware that Staff was going to make this adjustment, MGE started posting capacity for release, even though it considered it to be a useless act.

The evidence will show that no one responded to those postings. No one willingly offered to rent or buy that idle MGE capacity when it was essentially advertised for sale. The evidence will show that Staff has admitted that it has no evidence that anyone would have bought that KPC capacity if it had been posted.

Now, the Staff has proposed an alternative to simply posting on KPC and seeing if somebody out there would buy it. What they've said in their testimony is that, well, MGE should have posted some of its Williams Pipeline capacity for release, let that go, and then hauled the same amount of gas on KPC. The evidence will show that this would not have been an economical thing for MGE to do.

Staff's alternative approach assumes that MGE would have been able to obtain 75 percent of the maximum tariffed rate on Williams for that. In other words, it assumes that if MGE had posted this KPC capacity for release on Williams, that somebody out there would have paid 75 percent, three quarters of what the maximum FERC Williams tariff rate is.

Now, the problem with that, the evidence will show, is that the actual market data for this time period shows that people who did release capacity on Williams during that time period only were able to get about 14 percent, not 75 percent, 14 percent of the maximum FERC tariff rate, if they're even able to find a buyer.

The evidence will show the release revenues MGE presumably may have been able to obtain from Williams capacity under that scenario would not have been sufficient to offset the increased cost of utilizing its higher cost KPC capacity.

So in other words, there were no buyers under the Staff's first or main proposal, and under the second proposal, it wouldn't have been economic at the rate that the Staff assumes that -- even at the rate the Staff assumes we would get it and certainly not at the rate the evidence shows might have occurred if that transaction had occurred. Again, this is all hypothetical.

The prudence standard which applies in these type of cases holds that you need to look at a utility's decisions, not the results of the decisions, even if the results are hypothetical as what's going on with this Staff proposal. The prudence standard also holds that the Staff has to raise a serious doubt about the company decisions.

The Staff here is simply assuming that a sale could have taken place. The evidence will show the Staff cannot produce anyone who would have been a buyer for the capacity. The Staff admits that it does not know of anyone who would have bought the capacity, and it acknowledges there's never been a sale or release of capacity on KPC and there never have been any buyers.

In the face of that evidence which you will review this week, MGE submits the Staff cannot create a serious doubt about MGE's actions simply by posting a hypothetical situation. MGE believes the Commission should rule against the Staff on Issue No. 1.

Issue No. 2, this also concerns a new topic that I do not believe has ever been litigated before the Commission. In this issue, the Staff has alleged that MGE should have hedged a minimum of 30 percent of its normal winter gas volumes for the winter months; November 2000, December 2000, and January, February and March 2001.

Now, in reality, MGE hedged more than 30 percent in some of those months, less in two of those months. Over all of those months, however, MGE hedged approximately 38 percent of its normal volumes, which, of course, exceeds the Staff's proposed standard if you apply it on a seasonal basis.

The evidence will show that the Staff did not create this 30 percent monthly applied standard until the spring of 2002. So it was developed after the fact. Therefore, no one on this planet, much less MGE, knew going into the winter 2000-2001 that this standard would be applied to that winter's volumes, and that if they didn't make that arbitrary 30 percent each month cutoff, they'd be charged with imprudence.

Those of you on the Commission who are attorneys or who have studied the Constitution might be thinking that this sounds a little bit like an ex post facto law. Nevertheless, the Staff says that because MGE did not meet this standard in two of those five months, the ratepayers were damaged, the Staff wants MGE to pay the ratepayers $614,365.

The evidence will show that MGE acted within the range of prudent behavior in regard to the level of hedging of natural gas prices during that winter. MGE had a documented and Commission-approved hedging plan in place prior to the winters of '97-98, '98-99, '99-2000.

Similarly, prior to the winter of 2000-2001, MGE worked collaboratively with the Staff and the Office of the Public Counsel to establish an appropriate hedging plan prior to that winter.

The Commission will recall that a settlement was filed in May of 2000 that included two separate price protection mechanisms. That settlement was ultimately approved by the Commission in August 2000. However, due to unprecedented high natural gas prices, MGE was prevented from implementing either of those price protection mechanisms in accordance with the terms approved by the Commission. You'll hear evidence that the trigger price in there was not met because the market price was above the trigger price.

The evidence will show that MGE then took additional reasonable steps to attempt to modify those mechanisms to reflect then current market conditions, but those steps were not supported by the Staff.

The evidence will show that absent the Commission-approved settlement, there was no hedging standard approved by the Commission for that winter. Regardless, even with the unprecedented natural gas market conditions up to and during the winter of 2000-2001, the facts show that MGE utilized its storage gas and fixed price purchases to provide price protection to its customers for that winter.

Specifically, MGE actually hedged 20.3 billion cubic feet of gas in total for that winter, which is approximately 38 percent of its customers' normal winter requirements. The Staff even with its after-the-fact developed standard has not created serious doubt about MGE's decisions with regard to hedging for the winter of 2000-2001. Therefore, the Commission should reject the Staff's proposal in Issue No. 2.

Issue No. 3. This is another new topic for the Commission that has not previously, to my knowledge, been litigated. In this situation, the Staff has gone back and looked at how MGE managed the operation of its various gas supplies during the winter 2000-2001.

The Staff has developed a new and different approach on how it believes or proposes to operate MGE's system regarding the withdrawal of storage gas and how first-of-the-month flowing gas could have been utilized in that winter.

As with Issue No. 2, the Staff has developed this new approach to operating MGE's system after the fact. The evidence will show that it was never communicated to MGE as a standard or even a recommendation prior to the winter of 2000-2001.

Basically, the Staff has suggested a new approach on how MGE should manage and apply some of these gas supplies and wants to use it to measure economic harm without ever proposing it to MGE beforehand. The Staff says that since MGE did not follow the Staff's approach in that winter, even though it didn't exist then, MGE should pay its ratepayers $8,051,489.

The evidence will show that MGE acted within the range of prudent behavior in regard to its management of the first-of-the-month contract prices -- or excuse me -- first-of-the-month contract purchases, intra-month contract purchases and storage to meet its customers' heating season requirements in the winter of 2000-2001.

The evidence will show that this was an extraordinary time period. It will show that November 2000 was the second coldest November in the past 40 years. December 2000 was the second coldest December in the past 40 years. If you combine November and December 2000, it was the coldest consecutive November and December on record, on record.

No one, of course, knew that when we were going into the winter. When the weather turned much colder than normal in November 2000, MGE withdrew more gas from its storage to supply its customers' needs. MGE also scheduled fewer first-of-the-month flowing supplies for December 2000, based on information that was available to it at that time that prices for natural gas would be lower in December and that the weather would be more moderate.

The evidence will show that MGE's gas supply portfolio decisions for the winter of 2000-2001 met the challenges of this extraordinarily cold period. MGE's decisions resulted in no unserved demand, no operational constraints, and MGE was assessed no penalties under any operational flow orders from the interstate pipeline serving it. In other words, on an objective basis, MGE did what it was supposed to do to keep a reliable gas supply flowing and its customers warm.

There will be evidence that MGE purposefully plans on purchasing first-of-month flowing supplies sufficient to meet both monthly nonheating demand and a level of heating demand that's likely to occur based upon past operating experience. And then MGE supplements the first-of-month flowing supplies with storage withdrawals. This generally results in higher levels of planned storage withdrawals in November, relative to the other winter months due to three factors.

Factor No. 1 is the extreme weather variability and thus customer demand variability that can occur in November.

Factor 2, MGE has limited operational flexibility to inject any nominated but unneeded first-of-month purchased volumes into storage because storage is nearly full in November. You fill it during the summer so that it's full in November so that you can use it through the winter. If you have a lot of flowing supplies coming in and there's not much demand, where are you going to put this gas?

Now, Factor No. 3, in warmer than normal weather, the potential cost to customers of MGE could be that it would have to sell some of this excess first-of-month nominated gas into the market at precisely the time when nobody in the market wants it. If the weather's warmer than normal, gas prices are low and you have trouble trying to find a market for that, you may have to sell it for less than you paid for it.

The evidence will show that MGE's storage plan, however, has been essentially the same since the winter of 1998-1999. The Staff has not questioned or did not question those storage plans during those ACA periods.

The evidence will show that MGE withdrew a relatively greater level of storage than originally planned in November and December 2000, as compared to other years, but that was the result of the extreme cold weather being experienced in its service territory.

It will also show that this was happening across the United States, and that MGE's actions were very similar to those of most all of the other gas companies in the United States faced with the same weather and the same price extremes.

The evidence will also show that Staff's approach to managing storage and flowing supplies has logical faults. It poses a high likelihood of operating problems and serious economic consequences, meaning that in years other than the one for which it was developed, it costs more than the plan that MGE developed originally and has followed for these years.

MGE believes this issue is quite notable and unique because the Staff is questioning operating plans that have been in place for a number of years, despite the Staff having no meaningful operating experience on the gas system and apparently without regard to serious operating issues.

In brief, the Staff's proposed disallowance on this issue does not raise a serious doubt with regard to MGE's prudence and does not meet the test of the prudence standard. Accordingly, the Commission should reject this proposed adjustment.

We come finally to Issue No. 4. This is an issue where the Staff wants the Commission to order MGE to supply the Staff with additional information. The Staff has not suggested any monetary disallowance associated with this issue.

It appears to MGE to be an issue that has very little relevance to MGE's decisions made during the ACA period, but it appears instead to stem from the fact that MGE filed a reliability report on July 1, 2002 in compliance with the Stipulation & Agreement approved by the Commission in Case No. GO-2000-705. That case is not before the Commission today. That Stipulation & Agreement is also no longer in effect by its own terms.

MGE believes -- MGE believes that all of the Staff's issues with regard to this Issue 4 should have been adequately dealt with in the reliability report that was filed. MGE is aware of Staff's efforts to develop a statewide standard for gas supply reporting information. MGE believes it's more appropriate to attempt to deal with that kind of issue in another type of case, perhaps a rulemaking. It's more appropriate than trying to deal with it in a case where its relevance to the issues in this ACA period is quite questionable.

MGE's position is that no action should be taken on this topic in this proceeding since it's not relevant to a prudence review. That's all I have at this time.

JUDGE WOODRUFF: Thank you. And for Public Counsel?

MR. MICHEEL: Your Honor, I would waive my opening and just indicate that the Office of the Public Counsel supports the positions of the Staff.

JUDGE WOODRUFF: Thank you. And KPC?

MR. KEEVIL: Your Honor, I really don't have anything to offer by way of opening statement, in addition to what we set forth in our position statement. I would indicate that in the position statements we've supported MGE on the first issue and not taken positions on the remaining three issues. And with that, I would waive opening.

JUDGE WOODRUFF: All right. And for City of Joplin?

MR. DEUTSCH: Just a brief statement, your Honor.

JUDGE WOODRUFF: Go right ahead.

MR. DEUTSCH: Your Honor, members of the Commission, good morning. I'm Jim Deutsch. I represent the City of Joplin.

I just wanted to make clear that we are an intervenor in this case. The people and the City, as users and consumers of gas energy through this company, are vitally interested in everything that affects the issue of costs. And I have reviewed all the evidence and testimony here, and we fully support the Staff's position.

We don't intend to actively participate in cross-examination of witnesses. We are confident that what the Staff has suggested is reasonable. The issue here is prudence. More than that, I think you will find that the issue here is the lack of any judgment or taking any action imprudent or just simply something different than what the legal standard is going to be.

I disagree with Mr. Duffy's characterization of the Staff's positions, though, as being anything that -- or new issues that haven't been presented before ex post facto laws.

What, in fact, has happened, and I think what the evidence is going to demonstrate, is that we had some unusual market circumstances a few years ago that got everybody's attention, including the Staff. And what Staff has determined is that things that should have been being done, should have been conducted but were not a problem in the past because we have not had unusual market conditions were not being done, not being done prudently, in some cases not being done at all.

The role of this Commission of trying to bring some kind of a discipline, some kind of economic certainty and some kind of economic discipline to a monopoly organization that has no competition puts you in a position of looking at the conduct in this case as one of what would someone who is prudent in the business community have done if he had had a competitor, which they didn't, and couldn't just pass along the cost to the consumer.

There is a legitimate disagreement of the characterization of the facts of this case. We grant that to the company, but we fully support the Staff's position in this case and hope that the Commission is going to understand that, given the role of Staff, given the role of the Commission in providing this kind of discipline for the marketplace in a monopoly environment, that it is not simply a matter of whether the Staff has ever told them to do it before or whether the Staff has proposed it in the past or whether the Staff has looked at what they've done and been too critical.

The question here is a pure question of prudence, and we believe that a lack of the exercise of any kind of judgment on certain issues is not the equivalent of prudent judgment, and that the Commission is going to find that the Staff's case in that regard is compelling.

Thank you.

JUDGE WOODRUFF: Thank you, Mr. Deutsch. And for Staff?

MR. BERLIN: Good morning, your Honor. This case is about MGE not prudently managing its gas purchasing practices and not hedging enough of its gas supplies during the heating season of 2000-2001.

To more accurately frame the issues of this case, I quote words used by the Rhode Island Public Utility Commission to describe a settlement in a similar proceeding before them that approved a disallowance amounting to 22 percent of company net income.

The Rhode Island Commission in a multiple docket order concluded, and I quote, the companies in 2000 acted like the grasshopper in the fable of the grasshopper and the ant. Like the grasshopper, the company's frolicked during the spring and summer and did not prepare or plan ahead for the winter. When the winter came, the grasshopper perished. And unless the company wanted to share the fate of the grasshopper, it should plan ahead and be proactive, unquote.

In the case at bar, MGE, much like the grasshopper in this fable, was imprudent in not preparing for the winter that was, like the grasshopper, the cause of its demise. Just like the ant of the fable survived the winter and the grasshopper did not, Staff believes the Missouri ratepayers are due the benefits of prudent and proactive planning decisions.

There are four issues in this case. First issue, the Staff recognizes that MGE is entitled to recover all rates -- in rates all prudently incurred costs for gas purchases. MGE owns long-term capacity on Kansas Pipeline Company to meet customer demands, but did not use it in the summer months of the 2000-2001 ACA period.

Staff believes that MGE's decision to not post the KPC capacity for release or, alternatively, to not release equivalent Williams capacity to be imprudent. The $858,158 is the proper measure of economic harm.

The evidence will show during April through October 2001, MGE did not use any of its firm capacity on Riverside Mid-Kansas Pipeline. MGE did not post any capacity on KPC's bulletin board for release to other shippers, nor did MGE seek to use the KPC capacity itself, nor did MGE release capacity on Williams Pipeline Central. Staff calculates that by releasing its excess capacity, that MGE might have realized added revenues of $858,158, and MGE's ACA balance should be adjusted to reflect that released capacity.

The second issue, Staff recognizes that MGE is entitled to recover all prudently incurred gas costs. Staff holds that MGE should have hedged, at a minimum, 30 percent of each winter month's normal volumes, while MGE asserts there was no hedging standard in place prior to the winter of 2000-2001 but, nevertheless, hedged 38 percent of normal winter volumes.

Staff believes $614,365 is the appropriate measure of economic harm, because MGE's hedging conduct was not within the range of prudent behavior for the winter of

2000-2001.

Evidence will show MGE nominates a substantial portion of its flowing gas, that is gas coming from sources other than storage, on a monthly basis at the first of the month. Further, heating season weather differs from month to month. Ranking normal weather from coldest to warmest reveals that January is the coldest, followed by December, February, March and November.

Staff asserts that by the beginning of the heating season, MGE should have hedged 30 percent of each month's volume of gas hedge for each month, consistent with the different expected heating loads in these months. MGE failed to do so. It did not have minimum volumes hedged for the month of January and March. Had MGE done so, MGE's gas costs would have been reduced by $614,365, and its ACA balance should be adjusted to reflect that reduced gas cost.

The third issue, Staff recognizes that MGE is entitled to recover in rates all prudently incurred gas costs. MGE uses natural gas from first-of-month contract purchases, intra-month contract purchases and storage to meet its customers' heating season requirements. Staff believes that MGE was not prudent in managing first-of-month and intra-month contract purchases and its use of storage withdrawals. $8,051,049 is the proper measure of economic harm.

Evidence will show that the chance that January experiences the highest demand for natural gas is greater than any other month. Storage gas serves both as an operational requirement under MGE's transportation arrangements on Williams and as a physical hedge or insurance for price risk, risk which is much larger for natural gas when compared to most other commodities.

MGE's planned storage withdrawals for November of 2000 were unreasonably high and for January 2001 unreasonably low. Its actual storage withdrawals in November and December 2000 exceeded even the unreasonable planned withdrawals for these months by 63 percent.

This unreasonable use of storage left MGE vulnerable to operational shortfalls in supply should January weather have been cold, and exposed even greater volumes of natural gas needed by customers to price risk in January 2001, in the face of the highest first-of-the-month prices in history. MGE decisions in November and December left it with no choice but to purchase large amounts of this high-priced natural gas. The economic harm to ratepayers is $8,051,049.

In the fourth issue, Staff recognizes that in July 2000, MGE filed an annual reliability report pursuant to a Commission order in a prior case. The Staff reviewed the peak day and reliability information and the rationale for the reserve margin and has recommended in this case that the Commission order MGE to provide additional reliability information.

Staff believes this case is the appropriate forum in which to consider this issue, and that the Commission should order MGE to provide the requested reliability information.

MGE submits reliability reports pursuant to Commission order, and the Staff has used its operational review in the ACA audit process to analyze these reports. Staff has taken issue with MGE's failure to provide support for its assertions. Specifically, MGE refused to provide the assumptions and calculations it used to determine its peak-day demand estimates for 2002-2003, 2003-2004, and 2004-2005.

MGE did not provide the input and output data to support its base case, high case and low case demand scenarios. MGE did not explain why it uses 30 years data for the base case but only 20 years data for high and low case scenarios. MGE refused to provide a month-by-month plan for storage withdrawals, nor did MGE provide a check on its estimation model by checking the model's predictions against actual weather and usage data.

Staff believes that the information it seeks is information that MGE should have readily available if it is prudently planning its gas supply and transportation needs. Staff believes that establishing a separate proceeding to submit and to review this basic information would be an inefficient use of Commission and company resources.

And finally, in summary, I go back to the fable of the grasshopper and the ant that was used by the Rhode Island Commission in a similar case. Missouri ratepayers need not suffer from MGE's imprudent decisions and lack of planning, like the grasshopper who frolicked away the spring and summer and perished in winter.

Just as the ant survived winter with planning and preparation, the ratepayers deserve no less. The Commission must order Staff's recommendation so that ratepayers suffer no harm from MGE's lack of planning and preparation for the winter.

Your Honor, this concludes Staff's opening statement.

JUDGE WOODRUFF: Thank you. Let's go ahead and then take the first witness for MGE.

MR. DUFFY: MGE would call John Reed to the stand.

(Witness sworn.)

JUDGE WOODRUFF: You may be seated, and you may inquire.

JOHN REED testified as follows:
DIRECT EXAMINATION BY MR. DUFFY:
Q. Would you state your name for the record, please.
A. My name is John Reed.
Q. Mr. Reed, are you the same John Reed that caused to be prepared what has been marked for purposes of identification as Exhibit No. 1, direct testimony of John Reed, and Exhibit No. 2, surrebuttal testimony of John Reed in this proceeding?
A. Yes, I am.
Q. Do you have any corrections or additions to either of those documents?
A. Yes. I have two very brief corrections to my direct testimony. The first appears on page 33 at line 23. The second word appearing on that line, "is" should be "it," I-T. An identical change needs to be made on page 39 at line 14. The last word on that line, "is" again should be "it." That completes the corrections I have.
Q. If I asked you the same questions with those changes that appear in what's been marked as Exhibit No. 1 and Exhibit No. 2 this morning, would your answers be the same as they appear therein?
A. Yes.
Q. Are those answers true and correct to the best

of your knowledge, information and belief?

A. Yes, they are.

MR. DUFFY: At this time I would offer into the record Exhibits No. 1 and 2 and tender the witness for cross-examination.

JUDGE WOODRUFF: All right. Exhibit 1 and 2 have been offered into evidence. Are there any objections to their receipt?

(No response.)

JUDGE WOODRUFF: Hearing none, they will be received into evidence.

(EXHIBIT NOS. 1 AND 2 WERE RECEIVED INTO EVIDENCE.)

JUDGE WOODRUFF: And for cross-examination, we'll begin with KPC.

MR. KEEVIL: No questions, your Honor.

JUDGE WOODRUFF: City of Joplin?

MR. DEUTSCH: No questions, your Honor.

JUDGE WOODRUFF: Public Counsel?

MR. MICHEEL: No questions, your Honor.

JUDGE WOODRUFF: Staff?

MR. SCHWARZ: Thank you.

CROSS-EXAMINATION BY MR. SCHWARZ:

Q. Good morning, sir.

A. Good morning.

Q. Are you the same John Reed who provided a report to Southern Union and MGE in February of 1995?
A. I don't recall a report to Missouri Gas Energy in 1995. Certainly could be. It could be that we prepared a report for them at that time. I just don't recall.
Q. Do you have a copy of your Attachment A with you?
A. Is that my resume?
Q. Yeah.
A. Actually, I think that was supplied later. I'm not sure I have a copy up here. Thank you.
Q. Take a look at page 8.
A. I have that page.
Q. Under Rhode -- the Rhode Island Public Utilities Commission, the last entry, am I correct in reading that to mean that you filed testimony in January of 2001 in the Providence Gas Company and Valley Gas Company dockets 1673 and 1736?
A. Yes.
Q. And what were the issues that you testified on in that case?
A. Appropriate levels of risk management activities for the LGC; in that case, Providence Gas Company.
Q. And is Providence Gas Company a division of

Southern Union?

A. It's been renamed. It's now called the New England Gas Company, but it is now a division of Southern Union Company.

Q. Southern Union was your client in that case?

A. Yes.

Q. And do you have your surrebuttal testimony that's been marked as Exhibit 2 in front of you?

A. Yes.

Q. And would you turn to page 3 of that testimony, please?

A. Yes.

Q. And there at lines 23 through 27 you talk about that case, I believe, as identified in the footnote at the bottom; is that correct?

A. Yes.

Q. And it's -- if I understand it -- well, strike that. Let me proceed.

What time period was at issue in this case?

A. As I recall, the issues included the winter of 2000-2001. I think it actually included prior periods as well, but certainly included the same winter as we're addressing here.

Q. And it's your contention because the case did not go to trial that the -- that the cases are not similar?

Is that the import of your testimony there?

A. No. I had two points I was making in this bullet appearing on lines 23 to 27. The first is, it wasn't an adjudicated decision. So I certainly would not want to look at that settlement and say in some way it represented a precedent that should be reflected here in Missouri.

Secondly, the circumstances I said are not similar nor relevant to Missouri Gas Energy's situation in this case. The gas supply portfolio, the demands, the customers and the prior experience of the companies and commission in that state with regard to hedging are quite different than here in Missouri.

Q. And how are they different?

A. Well, among other things, Southern Union/New England Gas Company, Providence Gas Company, was coming off a period of time in which the Commission had given them very direct instructions on what to do with regard to hedging for their non -- I'm sorry -- for their core customers. They had, in fact, directed in a prior period that the company enter into a price hedge for 100 percent of its supply, which the company did and was approved.

The issues addressed in this case were what did the company do in the period after that price hedge had expired, which, as you saw in the settlement, was addressed through a disallowance of, as I recall, something like $2 million. But in this case, the history leading up to the hedging issues in this proceeding, as well as the company and the commission's prior experience with hedging, was completely different from what we have here.

Q. Are you aware that MGE participated in a hedging program pursuant to a case in the spring of 1997 that called for MGE to hedge 70 percent of each month's flowing supplies?

A. I don't recall the figure 70 percent. I'm certainly familiar with that MGE participated in hedging programs on a year-to-year basis as authorized by the Commission in the, at least, three years preceding the winter of 2000-2001.

MR. SCHWARZ: May I approach the witness, please?

JUDGE WOODRUFF: You may.

This will be 17HC.

(EXHIBIT NO. 17HC WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

BY MR. SCHWARZ:

Q. Do you have a copy of your direct testimony with you?

A. Yes.

Q. Could you turn to your Schedule JRR-1 -- J-J-R -- I'm sorry -- dash 1.

A. I have that.
Q. I have -- I handed you what's been marked as Exhibit 17HC. I provided a copy to counsel for MGE just before the hearing. Have you had a chance to examine this at all?
A. Yes, briefly.
Q. Would you agree that the -- in that first table, that the numbers in the columns and rows that begin, I guess, with the winter of November of '94-95 with a figure of 58, the bottom of that column is 123, over to the 254 for the historic average, and at the top of that column, 208, are the same as appear in your Exhibit JJR-1?
A. Yes, they appear to be.
Q. Have you had an opportunity to see if the totals across add correctly?
A. No, I've not tried to replicate the math on the table.
Q. Do you have a calculator with you?
A. Yes.
Q. Would you do that quickly?
A. Yes.
Q. Strike that. Would you take a moment and see if those are summed correctly?
A. They appear to be.
Q. Got another calculation I'd like you to do.

Would you divide the number 123 by the number 1,968?

A. Yeah, I did that. It's 6.25 percent.

Q. Okay. And that's -- rounded would be the shaded -- rounded down would be the shaded figure that's listed as the historic average as percent of total?

A. Yes.

Q. Would you do the same calculation for 455, divide it by 1,968 and proceed across the column?

A. The numbers on the gray shaded line historic average appear to be correct. The math is correct.

Q. Moving to the next table on Exhibit 17HC, are the numbers for the winter of '00-'01 the same as are on your JJR-1?

A. For the months of November to March, they are.

Q. And, again, could you do the total for me, please?

A. The figure for the total appears to be correct.

Q. And the next row below that is as it appears on your Schedule JJR-1?

A. I'm sorry. Could you ask that question again?

Q. The percent above, paren, below historic average on Schedule 17HC is the same as is on JJR-1, with the exception of the final column?

A. Yes.

Q. And if you divided the number 210 by the number 1,968, what do you get?
A. 6.7 percent.
Q. If you divide 210 by 1,968?
A. Yes.
Q. Okay.
A. 6.7 percent.
Q. My calculator says -- if 123, I think, divided by 1,968 is 6 percent, doesn't it make sense that 210 divided by 1,968 would be larger?
A. Let me make sure we're doing the same calculation. You want me to divide 210 divided by 1,968. I'm sorry. It's 10.67 percent.
Q. Using HP?
A. Yes.
Q. They're backwards.
A. This one's not.
Q. And similarly 773 divided by 1,968 and for the balance of numbers across that first line on 17HC?
A. You're asking me to verify the numbers on the first gray-shaded line?
Q. Yes.
A. Okay. Yes, they appear to be correct.
Q. Now, on the -- there's a third table on page -- I'm not going to ask you to do those calculations,

but would you consider that a plan to withdraw 23 percent of --

JUDGE WOODRUFF: Mr. Schwarz, I'm sorry to interrupt, but you've indicated this is HC and we're going through all these numbers in open session. Do we need to --

MR. SCHWARZ: Certainly. The prior numbers were all American Gas Association numbers and are in the public domain. These numbers probably are the HC.

JUDGE WOODRUFF: Do we need to go in-camera at this point?

MR. SCHWARZ: Yes, I would say so.

JUDGE WOODRUFF: All right. At this point we'll go in-camera. Let me get us off the Internet.

(REPORTER'S NOTE: At this point, an in-camera session was held, which is contained in Volume 3, pages 46 through 52 of the transcript.)

JUDGE WOODRUFF: Okay. We're out of the in-camera session, back in regular session.

MR. SCHWARZ: May I approach the witness?

JUDGE WOODRUFF: You may.

This will be 18, then, I guess.

MR. SCHWARZ: Yes.

(EXHIBIT NO. 18 WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

BY MR. SCHWARZ:

Q. Mr. Reed, I've handed you what has been marked as Exhibit HC, which consists of two pages, a graph and then some data.

MR. DUFFY: I'm sorry. Which part of this is HC?

MR. SCHWARZ: None of this is HC.

JUDGE WOODRUFF: I think you misspoke. You said Exhibit HC. Exhibit 18?

MR. SCHWARZ: I beg your pardon.

THE WITNESS: Yes, I have that.

BY MR. SCHWARZ:

Q. And, again, this was provided to counsel shortly before the hearing. Have you had -- have you seen it?

A. Yes.

Q. Briefly. If I -- well, the two plots shown are for the January and November data on the second sheet, which I will tell you is from Ms. Jenkins' rebuttal testimony, her Schedule 3, that was used both by Ms. Jenkins and by Mr. Langston.

Can you or have you confirmed that the graphical representations are, in fact, representative of the data?

A. I haven't tried to confirm the individual data points, but they're certainly representative.

Q. Let me ask you this: Is -- can you tell me in statistical terms what's the meaning of the term "range"?

A. It's the difference between the highest observed value and the lowest observed value.

Q. The calculations on Exhibit -- or the graph and the keys on Exhibit 18 indicate that the range for the weather data from 1971-72 through '99-2000 for the two months indicated, that the range for January is 788. Is that --

A. Yes, it does say that.

Q. And the range for November is 479?

A. Yes.

Q. Is the range -- so the range for January is greater than the range for November; is that correct?

A. In absolute terms, yes.

Q. In absolute terms it is. So in absolute terms you would expect January to be more variable than November?

A. No, that's not necessarily correct. Range is a measure of total dispersion, not a variability. The more accurate measure of variability, there's two, and if you turn to the second page of this table, they are shown there. The first is the standard deviation for January, it's 193. For November it's 123. That's a measure of the absolute value of the standard deviation or the absolute value of variability.

The second value you can derive is called a coefficient of variation, which is actually, in many cases, a more meaningful value. The coefficient of variation is simply the standard deviation divided by a median or the mean. I assume by average here, that's actually a mean. So if we took 193 and divided it by 1,185 for the month of January, you'd get something like 16 percent, as I recall.

Let's do it. Yes, you'd get 16.3 percent. If you did the same for November, you'd have 123 divided by 677, which is 18.2 percent. So by that measure, the coefficient of variation, November is actually more volatile than January. It is in relative terms, not in absolute terms.

Q. What do you mean by volatile?

A. It has greater variability around the mean as a proportion of the mean.

Q. Are there any limiting factors on the coefficient?

A. On the coefficient of variation?

Q. Yes.

A. I'm not sure what you mean by limiting factors.

Q. Any special characteristics of the population, any --

A. Not that we can observe from what's here. I haven't tried to examine whether there's a symmetric dispersion or anything else that would be different from sort of a normal distribution, but relative to the issue of the coefficient of variation, which is the relative measure of dispersion, that wouldn't affect that. The standard deviation is still going to be the standard deviation.

Q. But in terms of planning nominations and storage usage, is it not true that in terms of the volumes to be ordered, that there is a larger fluctuation in January than there is in November?

A. That's a good point, and the answer is there is a larger upward fluctuation, but actually the way it works, it's an asymmetric issue with regard to November and January.

And this is an important point from the record. The company, because it enters the month of

November typically with storage full, has very, very little ability to inject additional gas into storage. Therefore, the risk you're most concerned with is the risk of having excess gas flowing on the system and no home for it when you experience warmer than normal weather.

So you have the ability to withdraw more gas from storage in that month, but not much of an ability to put additional gas into storage. So when you nominate, you have to consider that asymmetric risk. In January, when you've typically depleted storage much more, you have the ability to have both upward and downward correction in using storage as a shock absorber. That's the phrase I think we used earlier in my testimony.

So there, given that you've already depleted some of the storage reserves, you have that upward and downward ability. That's why in November it's so important to not over-nominate the flowing volumes at the beginning of the month, because you have to recognize that either in relative or absolute terms, the demand variation you have from weather you may simply not have any place to put the gas. You may either be dumping it into a bad market or running up imbalances on the pipeline.

Q. Is it your understanding that the alternatives, given the levels of nomination, first-of-the-month nomination, that the only alternatives available to MGE during this period was to withdraw from storage?

A. No, that's not the only alternative. There are always alternatives that could be less expensive or more expensive. What I understand the Staff to have said here is that they think the company should have ordered more first-of-the-month flowing supplies, and they put in a number that's based upon a warmer than normal mean value.

The problem is, if you nominate even a warmer than normal mean value, you're not examining the consequences of those, I think as we examined more than half the days of the month in which you've got too much gas and no place to put it from having nominated that high of level of first-of-the-month volumes.

Q. Okay. But that does not speak to the method of meeting the swing requirements from the company's first-of-the-month nominations?

A. I think your question is, were there alternatives other than using more storage? You could have tried to buy gas on the highest demand days in the daily market, as an example. You could have obviously not served demand, I suppose, is an alternative which is very costly. But given the choices the company faced and given the resources it had contracted, it had adequate storage contracted and it developed a plan based upon those contracted resources.

Certainly if you choose not to use all of the storage you've paid for and then in addition go into the daily market on the days when demand is highest, that tends to be, of course, the days when the gas prices are highest, that tends to be an uneconomic decision.

Q. What is -- what is the purpose of hedging with respect to natural gas prices?

A. Hedging with regard to the issues we're addressing in this case is an attempt to reduce the variability for risk surrounding price changes. It's essentially an insurance policy against price increases or decreases greater than expected. It's essentially a judgment call that there's a consumer preference for stability over the lowest possible price.

And I think many commissions and the National Association of Regulatory Commissioners and the NRI have concluded that that's a very tough judgment call to state that, in fact, consumers have such a preference.

Q. But the purpose of hedging is to dampen the effect of spikes in the price of gas; is that correct?

A. Spikes or drops. I mean, typically the hedges that are either physical hedges, like storage or fixed price contracts or financial instruments, are symmetrical. You can attempt to buy asymmetrical callers or calls, but the answer is the typical hedge storage in this case is a hedge against price spikes or price drops.

Q. It's a hedge against price drops?

A. Yes. Technically risk is a deviation of above or below the expected value, not just above, and hedging reduces the variability above and below the expected.

Q. That's correct. But it's -- is it your testimony that hedging is intended to protect customers against drops in prices or is that merely a consequence of hedging against higher prices?

A. When you enter into a hedge such as storage, you enter into it knowing that the effect of it is to dampen upward and downward volatility of prices. So whether that is intended or it's a consequence, you go into that type of a hedge knowing it works both ways.

And as I've said, there are other forms of hedging mechanisms or price risk mitigation measures that are asymmetric, that have different costs. A storage hedge is one that you go into it understanding it dampens the volatility up and down.

Q. You mentioned NRI and NARUC discussions or considerations of using hedges to protect customers from price volatility and indicated, I believe -- and I don't want to misstate what you've said -- but indicated that there's -- thought that that's something that customers would want.

Are you aware of anything that suggests that customers want to be protected against falling gas prices?

A. I think you actually did misrepresent my testimony. My testimony was that the NRI research for NARUC has indicated that it is very difficult for commissioners to use their judgment as a surrogate for consumer judgment as to the preference for hedging. Some customers prefer to not be hedged. Many, in fact, do when given the choice prefer not to be hedged.

If customers -- generally it's acknowledged that customers have a preference for lower prices rather than higher prices, and if it's possible to limit the price hedge to simply protect against higher prices at a reasonable cost, then that would be the preference of consumers, but the problem is, of course, that that has a much higher cost than an asymmetrical hedge.

Q. And is that particularly true when prices are volatile?

A. The greater the volatility of prices, the greater the price of any hedge, an asymmetrical hedge more so than a symmetrical hedge.

Q. In the period, say, April of 2000 to February of 2001, would you characterize the natural gas market as volatile?

A. Yes, I'd say with the benefit of hindsight that it was increasingly volatile during that period.

Q. Is it true that the Natural Gas Daily publishes statistics on the volatility of gas prices on a daily or weekly basis?

A. Different industry trade publications do. I can't verify whether that one does.

Q. It wouldn't surprise you if it did, though?

A. Wouldn't surprise me.

MR. SCHWARZ: I would offer Exhibit 18 into the record.

JUDGE WOODRUFF: I have a question about 18 for you, Mr. Schwarz. Just an explanation of exactly what's shown on here. I see the bottom lines are by winter seasons, and there appear to be two entries per season. Can you tell me what those two entries are?

MR. SCHWARZ: I beg your pardon? On the front page?

JUDGE WOODRUFF: Yeah. On Exhibit 18, you've got the blue chart for January and the red chart for November. But for -- and then down at the bottom you've got the year. Let's just look at the first one for 1971-72. You've got the first entry for November is somewhat above 600, the second entry somewhat below 800.

MR. SCHWARZ: The explanation is that the graph would get extremely cluttered if you labeled the -- the first entry is for the year -- the heating season '71-72. The second from the data on the second page is '72-73. So they just labeled every other triangle, and I guess those are squares.

JUDGE WOODRUFF: Thank you for that explanation. That makes it much more clear.

MR. SCHWARZ: I'm glad I could finally explain something.

JUDGE WOODRUFF: Exhibit 18 has been offered into evidence. Are there any objections to its receipt?

(No response.)

JUDGE WOODRUFF: Hearing none, it will be received into evidence.

(EXHIBIT NO. 18 WAS RECEIVED INTO EVIDENCE.)

JUDGE WOODRUFF: And before you go on into another area, we're due for a break. Let's take a break now and come back at 10:35.

(A BREAK WAS TAKEN.)

JUDGE WOODRUFF: Okay. We're back on the Internet and let's go on the record.

When we left off, Staff was conducting cross-examination of Mr. Reed. Continue with that.

MR. SCHWARZ: Staff has concluded its examination.

JUDGE WOODRUFF: Okay. Then we'll come forward to the Bench for questions, starting with Commissioner Gaw.

QUESTIONS BY COMMISSIONER GAW:

Q. Good morning, sir. How are you?

A. I'm great. Good morning.

Q. Do you provide advice to LDCs around the country on appropriate hedging mechanisms in a planning role?

A. Yes.

Q. Do you -- do you provide that to MGE?

A. No, I don't think we've provided any planning assistance to MGE on the issue of hedging.

Q. All right. So your involvement with this case is as a result of the case itself and being asked to testify in regard to the procedures and things that occurred in the case during the time frame that we're dealing with in this matter?

A. Yes, that's correct.

Q. When you do give advice to companies in a prospective way, how do you evaluate how a company should approach hedging? What factors do you look at?

A. That's a very good question. It starts with trying to understand what I described earlier as the consumer preference. You have to understand your customer base. You have to understand the degree to which they wish to be insulated against price movements. I can tell you that with the number of utilities, the industrial customer base would actually prefer not to have the utility engage in some sort of price mitigation or risk mitigation.

With regard to core customers, residential customers, I think one of the most constructive ways I've seen it dealt with is by offering the customers a specific choice and having a tariff that that's essentially an unhedged tariff, and another tariff that customers can opt for that may be partially or fully hedged.

It's interesting, in states that have fixed-price options or lock-in options, as they're called, a substantial portion of the customers choose not to opt for the fixed price. They'd actually prefer to ride the market up and down.

When it's explained to them that the fixed price option, on average, would tend to be -- pick a number -- 5 percent more expensive than the unhedged option but much less volatile, the consumer preference expressed there through the election is frequently to go with the market.

So I always like to step back and say, first, what you're trying to do here is to exercise some management discretion over issues that really affect the customers, not the company directly. The best thing to start with is asking the customers what do they want.

I think there's testimony in this case that suggests that a customer survey is appropriate. That's one way to do it. I think the most effective way is actually to give them a real choice and say, here's a hedged option or a fixed-price option and here's an unhedged one, and see which one they prefer, given all the information in front of them.

I think the second issue you have to address is the regulatory environment surrounding hedging and what does the regulatory commission, State or Federal, express as its preference for a level of hedging, type of hedging, and the treatment of costs of hedging. And, again, we've seen commissions that literally have run the entire gamut from saying, we want absolutely no hedging, to commissions that have said, we want the entire price hedged for the entire season, at least for core customers.

In states like California where the utilities are encouraged to get out of the procurement role, to really turn over the issue of both core and non-core procurement to marketers, the judgment there has been that they don't think the utility should be providing those options. The marketplace should be providing those options, and they've instructed utilities typically to avoid hedging within the regulated business.

As I state, in Rhode Island, the commission there supported the company hedging 100 percent of its volumes through a third-party contract. They signed a lump sum contract with Duke -- that's public information -- for a fixed price for an entire three-year period, and they said, we want complete stability. We don't care if it's above market or below market. What we want is certainty. That was made much more attractive by the fact that it ended up being about 30 percent below market, but sometimes you get lucky, sometimes you don't.

But really we've seen regulatory choices run the entire gamut from a fully hedged position to a prohibition on hedging. So that's a second element the company has to consider.

The third really is the service area specifics, demand, sensitivity to weather, weather variability, and your alternative options, storage options, supply options.

If you're a utility that's operating in Texas, for example, close to the producing areas, it's typically not a big deal to go out and procure additional supplies on a daily, weekly or monthly basis, even in the winter. If you're in New England, where my office is now, you don't want to be running that risk. You don't want to run the risk that in the middle of January you can get additional pipeline capacity to bring gas up from the Gulf to Boston.

So each service territory has its own specifics and you need to consider that, too, but really those would be consumer preference, regulatory preference, and the service area specifics are the types of things we encourage our clients to look at.

Q. Okay. And without disclosing any names, do you provide any advice to anyone else in Missouri on a prospective basis?

A. We've done some work with Aquila in Missouri. I would say it only peripherally has touched on hedging. It's really been more on general gas supply strategies and general corporate strategies.

Q. All right.

A. But not to any degree specifically on hedging.

Q. Anyone else on hedging in Missouri?

A. No, I don't think so.

Q. Okay. And when you're -- when you're examining your three factors from the standpoint of -- of looking through the eyeglass of prudence, how do those factors -- then do all three of those factors continue to play a part in light of the perspective of a prudence review? First of all, that would be my question.

A. Yes. All three come into a review. You mean a prudence review, of course, is a retrospective analysis where you're saying is what the company did within a range of reasonable behavior, what a reasonable person would have done? Again, it's a range, not a specific point. And as I've said in my testimony, I think when you get totally unprecedented conditions as we had in 2000-2001, that range actually expands, because you don't have the benefit of prior experience having dealt with these issues.

But, yes, certainly when you look at the customer issues, hopefully before you get into the heating season you've ascertained what the consumer preference is for hedging and you've developed a plan to provide some level and hopefully an adequate level of hedging to the customer. I think the company did it here when it submitted actually a variety of prongs to try and approach hedging.

The second issue of regulatory construct, again, hopefully that's been ascertained before you've entered the heating season as to whether the Commission's going to permit you to recover the cost of financial hedges or whether the Commission has threshold criteria that you need to meet with regard to a portion of the volumes being hedged or something like that.

And then, finally, the service area specifics, as Mr. Langston states in his testimony, that's something you really have to respond to every day. You're looking at the current conditions, the day ahead, the week ahead, weather conditions. You're looking at your storage inventory. You're looking at where you expect prices to go and you're looking at what your options are with regard to other sources of procurement.

And managing that on a day-to-day basis is, A, a very complex undertaking, but also one that the companies spend a lot of time looking at. And from what we've seen here, I think the company is -- MGE has done a very good job of considering all of those issues as it went through 2000 and 2001.

Q. I understand your position on that. If I were to break these down, first of all, on customer choice, when you say the company had -- did have different programs in place, what are you referring to there?

A. It had proposed different programs, is what I'd said. It had proposed, first, essentially a hedging program and then supplemented that with the FCP program, which had the ability, if prices reached the trigger levels, of hedging the entire commodity price.

And then it also proposed on an interim basis doing a seasonal hedge, as opposed to a full year or multi-year hedge. And that's when it recognized, I think, in September of 2000 that its prior programs, even the one that had been approved by the Commission, wasn't likely to come into play, given where prices were at.

Q. But, in effect, there really wasn't any customer choice in that season that was ever implemented for whatever reason; would that not be accurate?

A. Yeah. I think there wasn't a customer choice. The alternative programs the company had put forward, some approved, some not approved, ended up essentially not being able to be implemented within the terms approved by the Commission. So the company did what it could within its existing authority, but there wasn't the type of choice that, I think, allows customers to express the most clear preference. Going forward, I think that's something that would make sense to look at here in Missouri.

Q. There are -- and you discuss some of those possibilities, but none of those, the general discussion you had about giving customers a choice about what program to opt into, that was not a factor and was not in play in -- during this -- during this period of time that we're examining?

A. Based on my understanding, I don't think that was an option that anybody in Missouri offered at that time.

Q. Yeah. I'm just trying to narrow this down a little bit. On the second factor dealing with the regulatory environment, what position did you -- do you believe the company found itself in, in regard to the regulatory policies that were or were not in effect during that time frame?

A. I think it found itself in --

Q. In Missouri.

A. Yeah.

-- in a position that was at best unclear. It had gone through the prior year's programs that had specific authorizations for specific years with regard to the hedging budgets and the hedging programs that were approved by the Commission. Of course, that had been modified into the FCP program for 2000-2001, which included the ability to lock in the commodity prices also, the ability to use hedges, but within certain limits of trigger price on the fixed commodity price and the ceiling price on the hedges to be used.

Again, the company, I think, beginning in June saw that there was a likelihood that -- at least a possibility that those may not be able to be utilized within the terms of that settlement at that time, the unapproved settlement. And then later, as the settlement was approved, the company once again saw realistically that it wasn't going to be able to implement the program because of the triggers and the ceilings contained in it.

It went back to the Commission Staff and asked for modification of the trigger provisions and the ceiling provisions which, of course, didn't happen. And then it proposed some alternatives, such as doing short-term hedges versus long-term hedges, just for the heating season. And there also wasn't agreement -- or I should say there wasn't Commission approval for those alternatives as well.

It found itself in the somewhat confusing position of having had prior programs that had been specifically approved, but did not have one that had been specifically approved that was capable of being implemented for that year. So it was a difficult position.

Q. So if we're looking at what we can put under the category of hedging for this particular year, are we just looking at storage?

A. No. I think that realistically there were three alternatives. Storage was one. The second was entering into fixed price contracts.

Q. I mean that actually occurred now?

A. Yes. Storage did occur. Fixed price contracts did occur.

Q. All right.

A. Financial instruments, I believe, did not get utilized, at least to my knowledge.

Q. Okay.

A. And that was probably the area of greatest uncertainty.

Q. Now, in regard to the storage -- well, let me come back to that.

Let me go to your category three, service area specifics. Can you give me more detail on what service area specifics would have been factors, what categories within that -- that category, what subcategory would have been important in this particular year for MGE?

A. Uh-huh. The first is everything that drives demand. So that would be weather, and that would be service area economics and usage characteristics. How much of your demand is weather sensitive, how highly weather sensitive is it, what portion of your throughput is the weather sensitive demand, and then, of course, the variability of the weather itself. So all of those things go into the development of a supply plan and a hedging plan.

The second issue is proximity and access to alternate markets. You've got a certain set of contracted supply resources, but when you get to unforeseen circumstances, what flexibility do those contracts provide you and what alternate resources are available?

For example, you know here the company actually was able to enter into a short-term interruptible storage contract that supplemented its existing services. It also was able to go out and buy gas mid-month during the daily market and didn't face an ill liquidity in that market. You'll find in other regions of the country that liquidity in the daily market is a lot less than it is in this portion of the country.

So it's really those issues that drive the sort of day-to-day supply and management. It's the demand side and it's the supply side, and obviously you have to consider your flexibility and your need for flexibility on both.

Q. All right. I want you to go back, then, to the first subcategory on dealing with variability and such things as weather and other things that are under that category and evaluate MGE's -- how MGE is under that subcategory.

A. Okay.

Q. Sorry for the question.

A. The company undertook what I would describe as analyses that were fully consistent with industry standard with regard to identification of heat-sensitive loads and non-heat-sensitive loads and --

Q. Let me stop you. I'm not asking for your opinion yet --

A. Okay.

Q. -- about how they handled that.

I want to know the specifics of their territory and the weather patterns in relationship to what you know about other places around the country --

A. Okay.
Q. -- so I can get a feel for how much of a variable this is when you're dealing with that subcategory.
A. From what I've seen of MGE's service territory -- and obviously I haven't done an extensive study of it -- it follows in line with an LDC that typically serves a mix of urban, suburban, a little bit of rural and industrial loads. Its principal customer base are customers that use natural gas for residential and space heating purposes. It's not a system that's dominated by industrial use. It's not a system that's dominated by electric generation use. It's not a system that's dominated by off-peak uses, such as irrigation or something like that.
So it's a fairly traditional LDC, and as such, it's subject to the traditional level of weather sensitivity in its loads. The difference, of course, here is that you don't have the degree of weather sensitivity that you do in a much more northern climate that has 2 or 3,000 more heating degree days in a year than the western part of Missouri does.
Q. Is that because of the -- of the coldness of the weather or the temperature in the northern parts?
A. Yeah, the northern climates. And if you're talking about a study for the upper peninsula of Michigan or Minnesota, obviously you've got extraordinary peaks there

and you've got overall for the heating season a much higher level of heating degree days than you do here.

Q. Okay. So -- and so because of that, over a longer stretch of time during the winter, then, it's a more significant factor; would that be accurate?

A. Where weather is a more significant factor in those northern climates, and you can also have an incredible variability in the winter seasons in many of those areas.

Q. Describe that a little bit for me, would you.

A. I'm talking about a good measure of the weather sensitivity for supply planning purposes, what's called the design day criteria for an LDC. You'll see some LDCs in northern climates that have a design day criteria of 85 degree days, which is a standard which the average temperature for the day is 20 below zero Fahrenheit.

That's a pretty extraordinary standard. That may be 30 degrees -- or 30 heating degree days for that day or 30 degrees mean temperature higher than the average, and it may require extraordinary efforts with regard to supply and planning. You don't have that level of extended peak demand here that you do obviously in Odin, Michigan or Green Bay, Wisconsin.

Q. When you have that, that type of an environment, and you're dealing with the hedging issue, what do you recommend that is done in those areas that would be different than a recommendation in an area more like the MGE territory?

A. The -- those service territories tend to experience what are called needle peaks, a peak that can last for a day, two or three days of extraordinary cold, something like 85 degree days. And they tend to be met through what are called supplemental supply resources, which include liquefied natural gas L&G tanks that can take L&G, vaporize it, put it into the system. It's right there. It's a fixed amount of liquid in storage.

They use propane air systems, which is the same sort of thing. We use propane as feed stock for converting into natural gas equivalent. It uses local supply in that area. It doesn't depend upon the pipelines and doesn't depend upon buying additional gas.

So essentially those represent something analogous to storage, but it's storage for three days, five days, ten days of peak supply, as opposed to a winter season. And where you have those times of extraordinary peaks, that type of supply tends to reflect the most economic option for meeting those needle peaks.

Because that is a feed-stock-based solution using L&G or naptha, in some cases, or propane air, it doesn't have a price risk issue associated with it. You typically procure the supply in the fall or in the summer, fill up your tanks and, like storage, you're buying gas in the off-peak season, so there's a degree of a natural hedge to it.

So you're able to actually experience and deal with very great weather sensitivity without the need to engage in greater risk management capabilities because you have a natural hedge through the feed stock.

Q. That's -- and that's not something that you would normally see in an area like what MGE has; is that what you're saying?

A. That's typically correct, because of weather and because of proximity to supply. If you're in Green Bay or if you're in Maine, in order to meet peak day demands, if you rely entirely on pipeline supplies, you'd have to procure pipeline capacity from the Gulf Coast all the way to Maine for 365 days a year.

Q. It would be extremely expensive?

A. It is. If you're talking about a shorter distance to procure pipeline capacity for, it would be different than procuring 2,000 miles of pipeline capacity.

Q. All right. And does that sort of get into your second subcategory on dealing with proximity to markets?

A. Yes.

Q. Could you go into that?

A. Proximity to supply sources. The closer you are to the supply source, the more economical pipeline alternatives will be and typically more economical storage will be because they're concentrated closer to your service territory.

In contrast, again, if you're looking at Maine as an extreme example, you tend to rely on market area storage, which would be developed, for example, in upstate New York, which is more expensive than the supply area storage. And you tend to develop a reliance on peaking supplies such as L&G, propane and so forth, rather than pipeline supplies.

Those are needle-peaking and short-term peaking options which you take advantage of because you don't want to procure a substantial increment of supply for something that's going to be used that infrequently, something that's going to be used five days of the year.

If you're closer to the supply source, you have a lot greater options, you have greater variability in terms of the access to different wellhead markets, the access to different storage fields and, therefore, typically the degree of reliance on those more extreme measures of supply source isn't required.

Q. And, of course, in comparison to Maine, MGE would be closer to supply sources?

A. Yes.
Q. If you would, would you -- go through and evaluate that factor with -- in regard to MGE.
A. Just that it is closer certainly to mid-continent supply sources, Hugitan Fields for example.
Q. If you could just describe the supply sources that MGE has, the positives and negatives of the supply sources and -- and the pipelines transmitting the gas.
A. Well, if you look at the principal pipelines we've talked about here, Williams Central, Panhandle Eastern Pipeline, KPC, you're talking about supplies that are primarily mid-continent supplies, which is Kansas, Oklahoma, Texas, and it can draw from those areas. You also have a mix of pipelines here that's obviously beneficial, as opposed to some systems that have a single pipeline serving them. So you can access different production areas, you can access different supplies, different storage options.
And as I said, the shorter distance between, say, Oklahoma and Kansas City is an advantage for pipeline supplies over something else, because you're not contracting for a long distance. So Missouri Gas Energy benefits from the diversity of supplies, the diversity of pipelines and the relatively close distance in terms of access of those supplies.
Q. Is there -- is there -- are there any

negatives in regard to the MGE system dealing with those supplies that you -- that you would note?

A. None that come to mind. I think any supply planner would say they'd rather plan for the Missouri Gas Energy system than the Northern Utility system in Portland, Maine.

Q. In --

A. It's a whole different system.

Q. In regard to the choices of pipelines, what pipelines, again, does MGE have access to?

A. Talked about Williams Central. We talked about Panhandle Eastern Pipeline. We talked about KPC. I believe there are others that are in proximity. I'm not sure if the company has any contracts on other pipeline systems. There are also upstream pipeline systems feeding those pipelines, which is relevant as well.

Q. And how so, for the record?

A. To the extent that, for example, Williams Central is interconnected with probably ten other interstate pipelines at least, it is able to access supplies from even further -- other basins. So although there may not be, for example, a direct connection to Rocky Mountain supplies, you can certainly access Rocky Mountain supplies through pipelines that feed Williams Central.

Q. Anything about the -- there's some discussion in some of the testimony about the amount that is charged on the KPC line. Is that in any way a factor in regard to as a negative on the supply sources of MGE?

A. Higher prices are always a negative, relative to lower prices, but that's a federally approved rate by the FERC, in terms of service approved by the FERC. I guess I'd hate to draw a conclusion from the federally approved rate and say that it's a negative.

Q. But in regard to evaluating the benefits of different sources, is that a factor?

A. Sure. Cost of transportation is always a factor.

Q. Okay. The approach that is taken by MGE in utilizing storage in November, is that -- is that a -- is that a procedure that you recommend to your clients when they're looking at how best to manage their supplies? Do you normally recommend that the companies utilize more of their storage in the first part of the winter season?

A. That's an issue that's very specific to the service area conditions and to the supply alternatives of that company. Here, I understand why the company's made that choice, because of the lack of flexibility they have with other alternatives and with the very high level of variability that they have of demand in November.

If a company were to ask our opinion as to whether that type of a structure is reasonable under those circumstances, the answer is that I think it is.

Q. I guess what I'm asking you is whether or not that is what you normally recommend to other companies in a prospective manner?

A. I think the answer is there isn't a normal, unfortunately. Every company is different and you need to look at the variability of other supply sources, you need to look at the variability of demand, and then make a storage plan that reflects those facts.

Q. And tell me -- tell me the circumstances that would exist when we would recommend not utilizing storage earlier. Again, I'm talking about in a prospective way.

A. Okay. Let me give you an example of a utility in New York that we've worked with, Keyspan, which was Brooklyn Gas. They tend to use less storage in November as a proportion of their total annual storage than Missouri Gas Energy does. One of the reasons that they have that as an option or that that's probably the right answer for them is that they have the flexibility in two ways on their system to accommodate swings up and down in November.

I think realistically they also don't have the variability in November that Missouri Gas Energy does. But even so, they have what's called salt dome storage, which is a high deliverability storage option that can inject and withdraw gas daily, and they start the season with that essentially half full, and they have the ability throughout the season to pump gas in and take gas out, and to avoid pipeline imbalance charges and to avoid short-term unexpected swings on the system.

So the extent that they over-nominate flowing supplies or over-nominate any other source of supply coming to their service territory, they're in New York, which is where the salt dome storage is. They have the ability to use that to pump gas in and out on a daily basis.

They also have right in their service territory something which you don't see very much anymore, but they have what are called above-ground gas holders, which are giant holders, and they have large number of them that they still use every day to absorb swings on the demand side of the system.

Before the gas ever gets to their citygate, they're able to control demand swings within their distribution system through the use of, I think the last time I checked, something like 12 above-ground gas holders.

So that type of flexibility says you can probably take the chance of using less storage in or nominating storage in the plan in November because you have the ability to put gas someplace and use something else as the shock absorber. I use that term again in my testimony that that's one of the primary benefits of storage for MGE is it serves as a shock absorber.

If you have other things like salt dome storage and above-ground gas holders that are also very good shock absorbers, you can use storage as more of a seasonal service, as opposed to a shock absorber. And I think what Ms. Jenkins has suggested in this case is an example of someone saying, you should be using storage more as a seasonal resource, less as a shock absorber.

Well, that's not the way it's been designed on the Missouri Gas Energy system. It's not the way the portfolio has been developed in this system. So while you would normally see a profile of underground storage that follows a seasonal pattern of November, December, January as degree days, that's not always the case and that's not the way this portfolio was designed, and I think appropriately so.

Q. And, again, when you say appropriately so, can you give me -- I know you've already discussed this, but give me your breakdown of why it is appropriate in this case for MGE to have to utilize this as a shock absorber, as you put it rather than --

A. Seasonal profile.

Q. -- based on seasonal profile.

A. Two reasons. First of all, their proportion of storage in their winter season mix is very high. In order to make full use of storage they really need to enter November with storage full or virtually full. They did that this year. That way you're getting maximum deliverability out of your storage throughout the entire heating season.

You've also got storage here that's reservoir-based storage, not salt dome storage they've contracted for, and that is the type of storage that is very difficult to inject into the storage during the heating season, during the withdraw season. So you enter it full. You really can't inject into November because it's full and you also can't turn the field around. So it's the type of resource that until you create that head room in the field by having some of your reserves, your supplies withdrawn, it really is a one-way flow.

You also -- I don't want to get into HC issues. I think there -- if I say there's some tariff issues that we probably shouldn't get into on open record, that dictate storage mix as a percentage of throughput.

Those are all peculiar to the MGE system. Type of storage, the reliance on storage, the fact that you want to enter the season with it full or virtually full, and the fact that you've got flow restrictions in terms of how much the flow coming into the pipeline system has to be representative of the storage withdrawals. That all says that this is not your typical seasonal storage resource. That doesn't mean it's a bad resource. It means it's a resource designed for some other use.

What it says is, it's not the kind of thing that you can count on to absorb over-nominations in the November period. That's the way the company's developed its plan is to reflect that reality.

Q. In looking at what went on in November of 2000, that -- in regard to what had occurred in previous years with storage use by MGE, it is true, is it not, that there was more storage utilized than what had been done in past years?

A. Yes. In the month of November, we're talking about?

Q. In November.

A. Yes.

Q. And can you tell how much of that storage use that varied from the past was due to weather?

A. Yes.

Q. And how much -- how much of that do you believe was due to the weather?

A. Approximately 70 percent. I mean, let me correct the math there, make the math clearer. The usage of storage in November was 70 percent above plan. The plan is developed on a normal weather scenario. What was actually done was based upon, of course, actual weather.

There was no attempt in November to engage in what I'll call price management as there was in December. In December the decision was consciously made to try and keep the prices as low as possible to the consumer under those circumstances by utilizing a higher proportion of storage and hope to buy later in the month, mid month or daily markets, rather than first-of-the-month markets.

But with regard to November, I would attribute all of this greater than expected volume of 70 percent beyond the planned level as being attributable to the weather.

Q. All right. So you believe that in the month of November all of the extra storage that was utilized was utilized because of the -- of the additional heat gas necessary to heat homes, et cetera, because of the cold weather in November?

A. That's correct. There was no price management going on. There were no failures of other supply sources. It was simply the operational choice to meet additional demand.

Q. And could -- could have -- could MGE have utilized other gas sources besides the storage to meet that additional demand from what was weather related?

A. Yes.

Q. And how much of that could have been done without taking that additional 70 percent as you said in storage?

A. That question's probably best put to Mr. Langston. I'll just leave it, I think that's better in terms of volumes that could be taken on mid month or daily purchases.

Q. And what about the -- and I want your -- I want your analysis about why that would not have been a good idea, in your opinion.

A. I think you can say with the benefit of hindsight it probably would have produced lower cost, but viewing it based entirely on the conditions as they prevailed at that time, prices were at an extraordinarily high level in November. When you're facing the choice of using $4 gas that you've injected into storage in the summer versus buying gas at $6, going to $7, going to $8 during the month of November, you're saying realistically, do I want to incur that level of, you know, peak pricing associated with the coldest November or the second coldest November in history?

The expectation -- and again, there's a lot of material in my exhibits which talk about what others were thinking during the month, but the expectation was that normal weather was going to return to the mid part of the country. There was an expectation the crises would -- prices would start to come down, and that, therefore, those people that had chosen to shepherd their storage were going to find that buying gas mid month was an expensive alternative.

So the question that I asked when I'm looking at the issue before us in this case is, was that conduct by MGE within a range of reasonable conduct, based upon the circumstances at the time on what they knew and what they should have known. I think it clearly is. In fact, I'd say it was well within the mainstream of thought within the gas marketing and trading community that taking gas out of storage in that month represented the most economic alternative, compared to making the interim daily purchases.

Q. If there had been a policy that had been established and was clear that storage on MGE's system should be utilized more from the standpoint of protecting price spiking upward, would it then have been reasonable for MGE to have done what it did in November of 2000?

A. You need to weigh any objective you have for the use of storage with regard to price risk management in regard to the primary concern for storage, which is reliability. I mean, the first thing you want to make sure is you've got enough gas in storage to meet the design conditions for the balance of your heating season. Of course, that's Issue No. 1; you don't run out of gas.

Q. Right.

A. Within that context, if there had been a policy that you should operationally dispatch storage so as to use it beyond its natural hedge, which is the fact that you've got gas that you bought in the summer going in, as opposed to gas bought in the winter, but you should shepherd storage in a way to manage price risk throughout the balance of the winter, do I think the company would have acted a little bit differently? Maybe, maybe not. It still comes back to an expectation about where those spot prices are going.

Remember, you're talking about buying gas in November, mid month, and in mid month for December as well, that was higher than it had ever been in those months ever, and that was in many cases almost twice what the forecast levels were for price just 60 days earlier. People were saying gas prices might get to $4. Well, they got to $8. Then they said they might get to 5. Then they got to $12.

So, in fact, you know, I look at the type of criticisms that were leveled against other LDCs around the country, it was primarily for doing that. It was primarily for going into those markets and buying mid-month spot prices at $8, $10, $12, not for saying that they should not have used storage to try to manage the price problems they were failing. So did I say that they would have done anything differently? My guess is they wouldn't.

I think their judgment would have been the same, that they didn't expect those prices, those very high spot prices to continue to prevail and, therefore, it was better to utilize the natural hedge they had in storage first, and then buy mid month or first of the month the following periods that were expected to be lower prices, more normal prices. As it turned out that judgment was wrong, but it was their judgment within the range of reasonable behavior.

Was it within the mainstream? I don't think there's any question about that. I think it was.

Q. And just to clarify, you don't believe it would have made any difference in your evaluation of whether it was reasonable or not for them to do something similar to what they did if there had been a clear -- a clear enunciation of policy without commenting on whether there was or was not at the time regarding the use of storage as hedging and shepherding it through the season?

A. If there had been a clear policy enunciated in advance that its primary purpose or one of its primary purposes would have been reasonable for the company to defer storage withdrawals, yes, it would have been reasonable.

Would it have been imprudent for the company under those -- those circumstances to do what they did? I don't think so.

Q. In December tell me how -- again, how that changed from November.

A. The difference introduced in December was there was more conscious choice made with regard to price management. There was a conscious choice that said, we're going to under-nominate first-of-the-month flowing supplies to the tune of about 20,000 a day, because we believe there's going to be significant downward movement in intra-month prices, as opposed to first-of-the-month prices.

And, again, from the articles that we've presented here in the exhibits to my testimony, you can see that there were many other people in the gas market who felt the same way, that mid-month pricing was going to break significantly off of first-of-the-month pricing.

As it turned out, because of a new cold snap that came in in December, that wasn't the case. But there the decision on first-of-the-month noms and the use of storage was also affected by that additional factor of engaging in clear decision with regard to price management, that wasn't a key factor in November for the first-of-the-month decisions there.

Q. Back just briefly to the issue of reliability, did you have an opinion in regard to the issue of reliability of the system if MGE had chosen to not utilize the additional storage it utilized in November? Would there have been reliability problems on the system?

A.   No, I don't think there would have been reliability concerns if they had left the gas in storage. The bigger issue, really, was if you take it out now, are you introducing reliability concerns, and no one in this case has suggested that the company introduced reliability concerns by doing that. The only issues that have been raised are price issues.

Q.   Just so I'm sure I'm following you, you did not see reliability as an issue if MGE had not utilized the storage in November that it utilized in a variance from its past practices?

A.   In terms of the variance from plan, no. Their plan is developed with regard to a fairly high level of withdrawal in November, which does have an issue with regard to variability. But the deviation from planned that resulted, I don't -- if they had chosen to shepherd those supplies and bought in November on the mid-month market, do I think they would have made the reliability problems worse? Not that I know of.

And, again, Mr. Langston, who is much closer to the fact at that time, may have a different view, but I haven't seen anything that would have said November's deviation would have introduced reliability problems.

COMMISSIONER GAW: I think that's all. Thank you, sir.

JUDGE WOODRUFF: Thank you. Commissioner Murray?

COMMISSIONER MURRAY: Thank you.

QUESTIONS BY COMMISSIONER MURRAY:

Q. Good morning, Mr. Reed.

A. Good morning.

Q. You mentioned earlier that MGE's type of storage -- I think you called it reservoir based?

A. Yes.

Q. -- storage versus salt dome storage, was that the other?

A. Yes.

Q. And you indicated that it's more difficult to inject back into the type of storage that MGE has; is that correct?

A. Yes.

Q. Wouldn't that argue for keeping the storage levels higher going into the winter?

A. Yes. Well, what it -- I'm not sure it would argue for that. What it says is, in order to fully utilize your storage for the winter, you want to go in with the storage full because your ability to inject in January or

December is probably going to be very limited. So you want to start the season with it full.

Then the subsequent corollary to that is that, because it's full in November, if you suddenly face an excess gas situation on your system because demand has dropped for weather purposes and you've nominated a high level of flowing supplies, you've got no place to put that gas.

Q. Which is uneconomical?

A. Yes. You're dumping that gas frequently into a market that has dropped 50 cents a decatherm or something.

Q. In that there was a high level of storage used in November -- and I've listened to the arguments about the volatility of the month of November and the need for using the storage that way in November. Was the reason that MGE then did not start to use less storage in December, was that reason based purely upon the forecast for what prices were going to do during the month?

A. I don't think I would say solely, but that certainly was an issue that was an influence on the decision as to what they thought prices in December were going to do.

Q. Otherwise, if they thought prices were going to remain level or perhaps go up, it would make sense to stop using as much storage going into the month of December, would it not?

A. I think they actually had a better choice, which was if they had thought prices were going up, if they had known what was going to happen, what did happen was going to happen, they would have probably bought additional first-of-the-month supplies which lock in the price for the month, as opposed to buying mid month or using more storage.
Q. From what you understand of Staff's position in this case and what they're proposing that MGE should have done, do you think that that -- that Staff's position is that there should be a minimum of 30 percent hedging for all years?
A. The Staff has been pretty careful about saying they don't view this as an absolute standard. They view it as one that they've introduced for this case and this year only, and for this utility only. So they've tried to avoid making a generic standard across companies and years, but they have said that they interpret this 30 percent threshold as applying to each month individually, not the heating season collectively, which I found to be a rather odd prescription for hedging.
Q. And is it accurate that MGE used the same plan in terms of withdrawal of storage and first-of-month flowing gas that they've used for -- well, basically since 1998?
A. Yes. Mr. Langston speaks to that in his testimony. And as long as you're asking a question about

the plan going into the heating season, the answer is yes.

Now, there's been a little confusion in the report here, because there were subsequent plans developed during the heating season, after the first month, after the second month, after the third month. Those plans for storage utilization in 2000-2001 looked different because you had already had one month of abnormal experience.

But going into the heating season, the plan for 2000-2001 was the same as the -- substantially the same, if not identical, to the plans developed for the prior three years.

Q.   So is the challenge that Staff is making here to the changes that were made to the plan or to the plan itself?

A.   That's best asked of them, but the way I read their testimony, they're challenging both. I think they are now taking the position that the plan was imprudent and the implementation of actual operations was imprudent.

Q.   And they did not challenge in '98-99 or '99-2000, the plan; is that correct?

A.   Yes.

Q.   And the results were different in those two years from implementation of the plan; is that correct?

A.   Yes. Those years, of course, were much warmer than colder.

Q. And you stated earlier that storage hedging dampens the volatility in both an upward and a downward direction; is that correct?

A. Yes.

Q. So if Staff had challenged MGE's plan in '98-99 or '99-2000, they would have been challenging a result which eliminated downside volatility; is that correct?

A. Yes, I think so.

Q. So it's okay from Staff's point of view as long as the downside volatility is not protected, but it's not okay if the upside volatility is not protected; is that your understanding?

A. It is. And I think the Staff has characterized that as sort of the no harm/no foul approach, that, well, we may or may not have liked what they did before, but it didn't result in adverse cost to the consumer, so we didn't challenge it.

At least this is my characterization, I should say. I don't think that's an appropriate standard of conduct. If the answer is you believe that a plan is imprudent, that should be communicated clearly to the utility, regardless of whether you think that plan happened to get by by being lucky that year.

Q. And that is, as I understand it, because it is the conduct that has to be prudent or imprudent, as separated from the results that result from that conduct; is that correct?

A. Yes, it is. And that's a point that in NARUC we have enunciated quite a number of times, that prudence relates to decisions, not to results. And unfortunately, I've seen a number of prudence cases where people focus on the result and say, this results in an above average cost, therefore, it's imprudent. Well, prudence relates to decisions, to conduct, not to results.

Q. And it has to be evaluated based upon circumstances that were known at the time the decisions were made, does it not?

A. Yes.

Q. And at the time the decisions are made, you don't know the results; is that right?

A. You don't know results, you don't know the weather, you don't know prices in the future, that's correct.

Q. On page 42 of your direct testimony you -- beginning on line 21, you say, while MGE attempted to implement the price stabilization fund on a modified basis to reflect then-current market conditions, Staff did not support such effort.

Would you expand on that a little bit and explain the atmosphere or the situation that it left MGE in, as far as understanding what the Commission wanted going forward?

A. What this is referring to is, of course, the attempts by the company to engage in discussions and restructure the settlement. When it became apparent that because the trigger mechanism would not be reached and, in fact, the caps established for the hedges were going to be out of market, they would not be able to be implemented, the company came back and sought modification of the trigger level, the cap level, and even the length of time on which they would hedge, and suggested higher levels for the prices and also suggested a shorter-term hedge.

Staff did not support that. The Commission did not approve any modifications to the program or a return to the prior year's program under the PSF. The company, from my reading of the evidence, at that point found itself in the position where they had had very explicit approval in the prior years for their hedging programs, and it was specific to that year, it was specific to a budget that authorized certain types of activities.

Those approvals had expired, and essentially what was in place, which was the FCP stipulation, and that had been approved and technically was in effect, but it was essentially a nullity because the circumstances would not permit the activities under the FCP stipulation to be undertaken.

So it then had to resort to sort of the normal course of business and what it could do to maintain price stability in terms of use of its storage, as well as the use of fixed price contracts.

And the company did go out and expand its use of fixed price contracts, and it did attempt to use its storage in a way to act as both a demand shock absorber as well as a price shock absorber. But obviously it was under circumstances in which what they had hoped to occur through the FCP stipulation did not occur.

Q. So what could MGE have gleaned from the actions that the Commission had taken to that point in terms of what the Commission expected for their hedging program?

A. Well, what they could glean was the authorization they had sought in terms of the return to the PSF program had been denied. They could glean -- so, therefore, they knew that wasn't the answer, that that wasn't something the Commission supported. At least it wasn't something the Staff supported and the Commission agreed.

And at the same time, it had the Commission's approval of the FCP program, which expresses a preference for hedging, but hedging under conditions that no longer were relevant. So I would say the answer is, it got mixed messages from the Commission, but the controlling message was one that the only thing we will approve is something that we now recognize isn't capable of being undertaken.

So I think the best answer is, it received mixed messages. At that point I would say it had no clear direction from the Commission with regard to how much hedging the company should engage in, and the company did the best it could under those circumstances.

Q. Do you think it's important for a company to have direction from its regulatory body as to the types of hedging that the Commission considers appropriate?

A. I do. I support the recommendations that the NRI has given to the state commissions with regard to developing proactive programs on hedging and developing explicit guidelines for companies in advance of their hedging activities. I also -- just as a brief aside, I had an opportunity last night to read for the first time the rulemaking that's just come out here May 1st in Missouri as the proposed rulemaking providing guidance on hedging, and I think that's a good example of what could be done on a proactive prospective basis, that type of guidance.

And, again, you can wordsmith the document, but that type of guidance that's explicit guidance about the objectives the Commission has on a going-forward basis is what I wish had been there in 2000-2001.

Q. When you -- when MGE received authorization for the price stabilization programs that were in effect during the previous years, did the company at that time have to show the Commission that or convince the Commission that there would be no detriment to the ratepayers in order for those programs to -- if those programs were in effect, do you know?

A. I don't remember the standard of no detriment. Any time you engage in risk management hedging, it comes at a price. The objectives of lowest possible cost and price stabilization are contradictory objectives in many ways. You have to recognize that there is a cost associated with risk management activities. So I'm not aware of there ever having been espoused a standard of no harm or no detriment to customers.

Generally the standard is that it's a net benefit to customers that they value the price stability higher than the cost of implementing the risk management program.

Q. So that sometimes it could end up costing more, but it's just more stable, more steady?

A. Yes. And some commissions have espoused that specific belief that we believe that customers are willing to pay more for a stable price than for an indexed price on average, over the long-term, and they think that's appropriate.

Q. You mentioned the rule, the proposed rulemaking, and do you think that if that rulemaking goes forward and -- let me start again.

Do you think that that rulemaking will provide more certainty and help to prevent some of the things that you outlined; for example, in your testimony beginning at the bottom of page 49 where you talk about the uncertainty and ambiguity of not having a prospectively established Commission-approved policy for hedging or gas supply management concerning all parties involved?

A. I think it's a significant step in the right direction. Your policy is actually -- or your proposed rule is very close to some that other commissions have put forward. The Arkansas Commission just a few months ago put forth some guidelines that were very similar. Colorado Commission is in the process of doing the same thing.

What I'd like to see happen is to then take it the next step, which is once that policy or rule has been established, to then apply it on a company-specific basis to provide some guidelines on volume and magnitude of programs.

While your proposed rule is specific as to intent and as to types of activities that are permitted, it doesn't get to the quantity issue. Would you like to see

20 percent, 40 percent, 60 percent coverage? Would you like to see a maximum dollar volume of price exposure being $50 million? Those kind of guidelines on a company-specific basis, I think, are the appropriate next step.

And, again, they can be guidelines so the companies can develop their programs prospectively, but I definitely think the rulemaking's the step in the right direction.

Q. I want to touch a minute on the capacity release issue. And in your testimony you say that this is the first instance in which Staff has raised this as an issue, even though MGE has never had a capacity release transaction on KPC.

My question to you is this: If the failure to release capacity on KPC is imprudent this year, why would it not have been imprudent in other years?

A. I think that's a good question. I find it hard to justify that -- that view that it's imprudent this year and it wasn't imprudent when they did it before. The capacity is such that it doesn't make economic sense to use in the summertime, but you can't buy just winter capacity on KPC. You can only buy year-round capacity.

I will say, I don't think the fact that the company did it before and it wasn't challenged is necessarily controlling. I mean, I think what's controlling here is the fact that there is no market for released capacity on a voluntary basis on KPC. The economics of the use of system, the rates and the competing alternatives of the interruptible service and service on the pipelines are such that it just does not have any value to release in the summertime.

That's what's controlling. But I do find it very hard to explain how one could deem it to be imprudent in that summer and not imprudent in prior or subsequent summers. The circumstances seem to be the same.

Q. In terms of the reporting standards that Staff has been suggesting -- and I believe that's the -- that's what's been called Issue No. 4 here, that the company is opposed to Staff's position there -- can you explain why the company wouldn't be in agreement with that position?

A. At this point, Commissioner Murray, I'm going to defer that question to Mr. Langston, if I can. I didn't address the reliability standards in my testimony, and that's just not an issue I've really looked at.

Q. All right.

A. I'm sorry.

COMMISSIONER MURRAY: That's all right. Thank you very much.

JUDGE WOODRUFF: Commissioner Forbis?

QUESTIONS BY COMMISSIONER FORBIS:

Q. Good morning.
A. Good morning, Commissioner.
Q. I think most of my questions have been thoroughly addressed. I just wanted to -- when you brought up the rule, it made me think a little bit. And Commissioner Murray asked you some questions about it, but my question to you was going to be, do you think the rule is specific enough as it's drafted, because it is sort of -- it encourages companies, as I recall, to engage in hedging activities. Then you came back and mentioned that you thought it would be good to go a next step and make it more specific to each company and get into particular numbers --
A. Uh-huh.
Q. -- you know, how much to hedge.
Which is what I'm going to ask you, but then let me follow that up and say, do you think that can be done, or does that take away the flexibility from the individual companies if you several months in advance say you will do 30 percent or 20 percent, or is that realistic to attempt that on a company-by-company basis?
A. Let me just clarify that, of course, I wasn't attempting to say the rulemaking should be more specific, but the application of the rule once it's officially in place, I think, can lead to some more specific guidance to companies.

Yes, I do think it's possible. But I think what you have to avoid is overstepping the appropriate bounds for a regulatory agency, as opposed to somebody who's operating the system. That's always a fine line to walk. But I do think there are some guidelines that can be established.

If the Commission, upon hearing all the evidence, determines that, for example, having 30 percent of winter volumes hedged is what they consider to be an appropriate minimum level for MGE or for any other company, that's the type of guidance I would see coming out of that case, and it would be prospective.

I do think the emphasis should be on thresholds, not on target, not on specifics. I think the emphasis should be on seasonal attributes, as opposed to daily, weekly or monthly attributes, for example, the standard here that -- the fact that you're 35 percent one month and 29 percent next month means that one month that 29 percent is imprudent, that's just too fine a screen, in my opinion, to try and judge prudence of gas purchase costs. Seasonal guidelines tend to be more appropriate than daily, weekly or monthly guidelines.

But I do think when you step back and say the whole issue of hedging is one where we're trying to ascertain consumer preference, we're trying to say how much insurance does the customer want to pay for? Once we know the price of that insurance, you know, this isn't something the company profits from or doesn't profit from. It's intended to be, of course, an activity undertaken by the Commission and the company for the benefit of the customer. How much price protection do we want to secure for the customer?

So it is a judgment call. And given how inherently judgmental it is, I think some type of guidance on degree of coverage, it's like saying, do you want $100 deductible on your insurance or a $500 deductible or $1,000 deductible? That's a judgment call and different answers apply for different customers. Different people have different levels of risk adversity.

So I do think some guidance in quantity. Quantity seemed to me, from reading the rule, to be the one issue that was totally open under the rulemaking. It addressed instruments, it addressed objectives, it addressed public purpose. It didn't address quantity in the sense of how much to buy.

Q. And your sense would be that should be left up on an annual basis to working with the customers of the company to decide how much from the -- take the entire customer base, figure out sort of per industry type what's appropriate, and then mix it up and get a number?

A. I think there's two ways to go. One is the judgemental approach which most commissions use, which is say we think there's some minimum standard that's appropriate, just to provide an appropriate level of cushioning for customers. And that might 20 percent, 30 percent, somewhere in there on a seasonal basis.

The other way is what I talked about with Commissioner Gaw, which is the notion of a dual tariff, one that truly provides customer choice, that says the company's going to have an index-based tariff and it's going to have -- which is the traditional PGA, and it's going to have a fixed-price option or a risk mitigated option available to customers. And you explain to customers the differences in cost, the differences in risk of those two approaches.

The issue is once a customer elects for the heating season or for the year, they have to stick with that. I have to say, okay, for this calendar year or this heating season, at least, I'm going to select the fixed-price option risk mitigated option. And then the customer has to stick with that, because the company then adjusts its supply portfolio.

If it sees that 30 percent of the customers have elected Tariff A and 70 percent have elected Tariff B, it knows exactly how much to hedge. And that's -- that's the most clear and direct means, I think, of ascertaining consumer preference, but it is more complicated. It means developing separate tariffs, separate service offerings for the same customer class, and it also involves a lot of customer education.

I come from a state -- now, I'm from Kansas. I live in a state now that has that option for electric and gas service, and also if you're an oil customer, you can get that from your oil heat dealer. You can choose whether you want a fixed price for the entire heating season or you can ride the market up and down.

I choose to ride the market. I figure at some price, you know, I'll just chop wood and put it in the fireplace, but different people have different prices.

Q. Using your plan as also an exercise program. That's very good.

Are you aware of any national standard? We've been throwing around 30 percent. The company used 38 as a mix of physical storage and financial hedging, as I understand. Is there a standard that you know of?

A. There isn't a standard, and I don't think there should be a standard on a national basis, because the service area specifics are just so different. Imagine a system where, you know, 50 percent of your load is ammonia plants for fertilizer versus a system like Brooklyn Union, where most of your customers come from apartments and we have a lot of people on fixed income budgets. It's a much different mix across the country. There isn't a national standard and I don't think there should be.

Q. And part of the discussion here has been, as I understand it in this case, monthly averages versus season long averages?

A. Right.

Q. And I think you said in your testimony -- help me remember this -- you are of the opinion that a seasonal average is better because of storage demands and you might over-obligate or under-obligate and then you're stuck, right, if you tried it month by month. Could you help me make sure I understand that?

A. Yeah. I do think a seasonal target and performance measured against that seasonal target is much more meaningful than a monthly target. I mean, you could actually take that to the extreme and say why not set a minimum hedging target for every day of gas supply? What you do is you remove operational flexibility from the company to the extent you say, you've got to hit 30 percent every day or every hour or your supply has to be hedged, you remove operational flexibility.

From a customer's perspective, especially in a state that you've got PGAs that are run on quarterly, semi-annual or annual basis, the difference in the PGA between having a monthly target and seasonal target is meaningless, because it all gets aggregated together into the PGA value for that period of time.

So why you'd say I want to remove the operational flexibility when there's no economic difference to the consumer is beyond me. If the target's 30 percent, it should be for the period that the customer's getting priced, six months, quarterly, annually through different PGA mechanisms.

COMMISSIONER FORBIS: Thank you. That's it for me, Judge.

JUDGE WOODRUFF: I have a couple questions.

QUESTIONS BY JUDGE WOODRUFF:

Q. First of all, you use the term "pipeline imbalance charges." It's frequently used and I don't think it's actually explained by anyone in the record. Can you explain what that is and what effect it has on MGE's decision?

A. Yes. These are charges assessed by the pipelines, and all pipelines that are FERC-regulated pipelines have either daily or monthly imbalance charges or both. And it's whenever you've put more gas into the system than you've taken out or taken more gas out of the system than you've put in, so you either have an overrun or underrun on the pipeline, are the terms they use, and there are penalties associated with both an overrun and an underrun.

I do think Mr. Langston's rebuttal or surrebuttal mentions these pipeline penalties and said that, again, one of the reasons why the company likes to have the shock absorber of storage available in November is to avoid incurring imbalance charges on the pipeline.

Q. I assume these imbalance charges would be fairly substantial?

A. They can be in excess of $30 a decatherm for some. They tend to be tiered; the more out of balance you are, the higher the penalty gets, but yes.

Q. They're designed to discourage companies from taking out more than what they're supposed to or taking out less than what they're supposed to?

A. Yes, exactly. They're intended to be penalties.

Q. I assume that commissions in this state and other states tend to frown on companies that have a large amount of imbalance charges?

A. In fact, one of the prudence cases I've been involved in before is where a company did incur imbalance charges on the pipeline system, and the question was whether they should be passed on to consumers.

Q. What was the result in the case?
A. It was a partial disallowance of some imbalance charges the LDC had incurred, because of the fact that they had run a substantial imbalance on a monthly basis with the pipeline.
Q. I want to talk about financial instruments and using them for hedging for a little bit. I think the testimony was in this that for the season MGE did not use financial instruments to hedge; is that right?
A. That's my understanding. But, again, I think Mr. Langston probably is more familiar with the details than I am.
Q. Well, I'm not much concerned about the details. In the -- what would be the risk to MGE or for any company to go out and just purchase these financial instruments without specific approval from the Commission?
A. The issue, first of all, is cost recovery. If you're buying an option there's a premium associated with that option and getting cost recovery of the premium is one issue.
Q. So the question would be whether the commission would allow you to recover that cost?
A. That's one question. The second is when you close out the position, you typically are going to have a gain or loss after you -- very seldom do option contracts,

financial contracts, actually get physically performed. They typically get closed out in the final week in which they're open, in which they're trading, so you have a loss or a gain when you close out that position. And then you have the same question about recovery of that loss or gain.

So cost recovery is the first issue. We talked about in prior years MGE, as I understand, had a specific budget approved for risk management activities that was not the same situation going into 2000-2001.

JUDGE WOODRUFF: I believe that's all the questions I have.

Commissioner Murray, did you have anything further?

COMMISSIONER GAW: I do.

JUDGE WOODRUFF: Commissioner Gaw.

FURTHER QUESTIONS BY COMMISSIONER GAW:

Q. Just a couple of things. Are you familiar with the potential imbalance charges that could have impacted MGE in this case?

A. In general, yes.

Q. Can you tell me what they are, if you know?

A. I'd have to go back and review the tariffs. Each timeline has their own set of imbalance charges, and as I recall, Williams, I think, is tiered so there are different imbalance charges for different levels of imbalance; 5 percent, 10 percent, and so forth. So -- it's public record. It's in the tariffs of the pipelines. I don't have that information with me.

Q. Okay. And my only other question is, you did say you were from Kansas?

A. Yes.

COMMISSIONER GAW: Just checking. That's all I have.

JUDGE WOODRUFF: Commissioner Murray?

Was that a Jayhawk bias?

FURTHER QUESTIONS BY COMMISSIONER MURRAY:

Q. Mr. Reed, in that cost recovery is one -- is one of the issues a company looks at in determining hedging, use of financial instruments particularly, in a rulemaking are you familiar with any rulemakings in any states that provide that, in addition to encouraging a company to use certain methods, that the Commission will include -- will recognize cost recovery for prudently incurred expenses?

A. Yes. There are a lot of commissions who've, in fact, made that much more explicit since the winter of 2000-2001. If you take a look at the publications of the NRI since that winter, there's a number of them that -- in fact, they did a survey of what commissions have done in response to the winter of 2000-2001, and in many cases it's explicit in rewriting the rules to include gains and losses on financial instruments as part of what can be tracked in the PGA.

It's certainly much more sensible tracking the PGA than to say, we're going to build those hedging costs into the base rates, because it changes significantly from year to year and it is a gas cost. So what you see, for example, is some states having to rewrite their rules to define gas cost as including premiums, losses and gains on financial instruments used to hedge the gas portfolio. So, yeah, you have seen explicit recognition of that in a number of cases.

Q. And is that a good idea, in your opinion?

A. I think it is. I think, first, the PGA's the right way to treat it, and secondly, any reasonably and prudently incurred cost associated with the gas portfolio for hedging purposes, whether it's an option premium, a gain or loss in closing out an option position, is appropriately treated as the same as buying gas at a fixed price or buying gas at an index price. I think that's the appropriate mechanism for ensuring that the company's not advantaged or disadvantaged by undertaking the risk management activities that the Commission has directed are appropriate.

COMMISSIONER MURRAY: Thank you very much.

JUDGE WOODRUFF: Thank you. At this time we're due for a lunch break. We're going to break for lunch and we'll come back at 1:30.

(A BREAK WAS TAKEN.)

JUDGE WOODRUFF: All right. Before we broke for lunch, we had just completed questions from the Bench for Mr. Reed. So now we'll go to recross, and begin with KPC.

MR. KEEVIL: I have no questions, Judge.

JUDGE WOODRUFF: And counsel for City of Joplin is not here at the moment, so they're waiving their cross.

Public Counsel?

MR. MICHEEL: Yes, I have a few, your Honor.

RECROSS-EXAMINATION BY MR. MICHEEL:

Q. Mr. Reed, in response to Commissioner Gaw, you talked about the regulatory construct. Do you remember those questions?

A. Generally, yes.

Q. And in the regulatory construct, if I understood your testimony, you suggested that there should be some numbers set out with respect to hedging and appropriate levels of hedging. Is that a correct distillation of your testimony?

A. Yes, I think there should be some guidelines established.

Q. You're not suggesting in any way, shape or form that the Commission should preapprove specific levels of hedging or use of financial instruments, are you?

A. No. As I suggested, I think the better approach is to establish some guidelines and perhaps some thresholds that the Commission would like to see, but it's not a preapproval of prudence. It's not a preapproval of any specific plan.

Q. And under your knowledge or idea, would the company be required at all to meet or follow any of those thresholds?

A. That depends on the Commission and the approach in that state. In some states there are mandatory activities. In some states there are voluntary guidelines. In others there are pilot programs.

Q. Okay. Let's unpack that. What states are you aware of that have mandatory guidelines?

A. Give me just a moment. There's a recent NRI survey that talks about what's out there. Let me see if I can find it quickly.

Q. Okay.

A. An example of a state that's provided what I'll call very strong guidelines is Pennsylvania. Pennsylvania has set as a benchmark for review that they think 25 percent is the appropriate hedging level for companies, and they have established that through a rulemaking. They then review each company's annual performance relative to that benchmark. I wouldn't describe that necessarily as mandatory or as a requirement. It's a very strong guideline.

Q. Okay. And throughout your testimony you've talked about states that are doing mandatory requirements, and I'm asking you to identify one of those states.

A. I'm not sure up until now we've had any discussion of mandatory. The programs that are, quote/unquote, mandatory are the new rules that commissions have written. For example, in Utah, the commission's policy was changed in 2001 in Utah to require utilities to consider price stability as well as reliability and -- I'm sorry -- just that. Price stability was required to be considered in addition to the lowest possible price and reliability.

So that's essentially edict or rule by the commission saying, from this point forward, you have to give weight to price stability, not just to the prior guidelines we gave you of reliability and low price.

Q. And this NRI publication that you're referring to, could you tell me the name of that publication?

A. There's actually three, but the first one is dated August 22nd, 2001, and it's entitled Summary of State Responses to Last Winter's High Natural Gas Prices and Consideration of Hedging and Other Risk Management

Activities. The more recent update on that is Regulatory Questions on Hedging in the Case of Natural Gas, which is February 2002.

And the other one is also dated August 2001, and it's State Responses to Last Winter's High Natural Gas Prices and Consideration of Hedging and Other Risk Management Activities.

Q. Okay. And you had talked, I believe, in response to Commissioner Gaw about proposed rulemakings and guidance and preapproval, and you recommended the Arkansas and the Colorado rulemakings. Do you recall those questions?

A. I recall the questions. I don't think I recommended them. I noted that there were two others that had taken place recently in a similar vein to what's been proposed here in Missouri.

Q. And are those -- are those in the category of mandatory or guidelines, or what type of rulings are those?

A. I would say they are guidelines.

Q. Okay. With the exception of Arkansas, Colorado, Pennsylvania and Utah, are you aware of any other states that set out guidelines?

A. Yes, there are several, and that NRI publication actually reviews 28 states, and I would say that most of them have established guidelines.

Q. Are you aware of any states that preapprove specific levels of hedging or for gas hedging or anything like that?
A. Well, as I just read, the Pennsylvania rules use a 25 percent hedging rule as sort of their benchmark. At this point, that's the only one I'm aware of that has a specific percentage that they apply across companies.
Q. Now, when you're speaking about the regulatory construct, you would agree with me that the purpose of regulation is to mimic the market; is that correct?
A. I've certainly heard that described. Regulation serves as a surrogate for competition in regulated markets.
Q. And would you agree with me that in a non-regulated market we don't have any preapproval or anything like that?
A. That's correct.
Q. You talked with Commissioner Gaw and Judge Woodruff about financial instruments and the fact that MGE during this time period did not have any financial instruments. Do you remember those questions?
A. Yes.
Q. Are you aware of any prohibition in the Commission rules or Missouri statutes or Commission decisions which would prohibit the use of financial

instruments by any LDCs in this state?
A.   I haven't undertaken a review of statutes or rules for that purpose.
Q.   Did you review any decisions that prohibited them from using those financial instruments?
A.   Same answer. I didn't conduct that review.
Q.   And am I correct, I believe in response to Judge Woodruff you indicated that you believe that financial instruments are appropriately included as gas costs; is that correct?
A.   I think that's appropriate regulatory policy, yes.
Q.   Have you seen any Commission cases, Missouri Public Service Commission cases or any other state public service commission cases or their -- some of them are called corporation commission, like in your home state, Kansas, that have disallowed or suggested that financial instruments are not gas costs?
A.   Yes. I'm sorry. Your question was are there some that have taken the position that financial instrument costs are not gas costs?
Q.   Yes.
A.   Yes.
Q.   And what states would those be?
A.   Again, that's summarized in the NRI

publication. Let me see if I can find a quick example or two. Give me just a moment to see if I can find that.

In Maryland, hedging and hedging costs are not approved for any utility with a transitional PGA mechanism, only for a utility with an index-based cost incentive mechanism. So that's an example of where through a PGA utility, which there are some there, they did not include those costs.

Q. And those NRI documents that you're referring to, I guess, or you're divining your answers to, what do they say about Missouri's treatment of hedging costs, if anything?

A. Missouri, unfortunately, is not one of the 28 commissions that they talked about, because Missouri did not respond to the survey, according to the NRI.

Q. Commissioner Murray asked you some questions with respect to prudence, and I believe your answer was the conduct should be separated from the result; is that correct?

A. Yes.

Q. So even if the result was good, let's say, for example, the company made some money, if the action was imprudent or contrary to tariff or something like that, the Commission should make a determination setting the result aside; is that what you testified to?

A. I don't follow your question. I'm sorry.
Q. Well --
A. I'm not sure what you mean by setting the result aside.
Q. Well, I think you said the conduct should be separated from the result; is that correct?
A. Correct. Prudence relates to conduct, not to results.
Q. So if there was a good result, let's say, it is still appropriate or the Commission could logically find imprudence on the part of a utility; is that correct?
A. It can find imprudence even where the consequences of that were not adverse to the customer, yes.
MR. MICHEEL: Thank you very much.
JUDGE WOODRUFF: All right. For Staff?
RECROSS-EXAMINATION BY MR. SCHWARZ:
Q. Commissioner Gaw asked you a series of questions about storage plans and operations. Do you recall that line of questions?
A. Yes.
Q. Have you analyzed other Missouri LDCs' plans who also use Williams storage?
A. No.
Q. What about any Kansas LDCs that use Williams storage?

A. No, I don't think so. We've done some research on the ONEOK system, looking at their use of storage, which includes Williams, but I don't think we looked at the -- their specific use of Williams storage.

Q. Do you know where other Williams storage customers were in terms of their storage balances on November 30th or December 31st of year 2000?

A. No, that's not something I've looked at.

Q. I believe in response to a question from Commissioner Murray, you indicated that the prior year's approvals of the explicit storage programs had expired, but the company did subsequently use some fixed-price contracts. Do you remember that?

A. I believe so, yes.

Q. And that's -- you're aware that the company did use fixed-price contracts?

A. Yes.

Q. Is there any specific authority in MGE's tariffs for them to use fixed-price contracts?

A. No, I don't think so. I'm not aware of any.

Q. Are there any provisions authorizing MGE to use index-based contracts?

A. Not that I'm aware of. In its tariff you're asking?

Q. In the tariff.

A. No.

Q. No. Are you aware that there are other Missouri utilities that purchase gas on a fixed-price basis or secure financial hedging instruments without any direct tariff authorization from the Commission?

A. I haven't conducted that review. I really can't -- I can't answer that.

Q. Again, and I can't remember if -- which Commissioner it was, but with regard to the Commission's proposed rule that you indicated, I believe, that it should apply on a company-specific basis. Is that --

A. No. That's actually the opposite of what I said. I said the rule should be a generic rule. The application of it should occur on a company-specific basis.

Q. Company-specific basis.

A. So the results of its application would be adjudicated individually for the companies.

Q. How -- how would that be adjudicated on a company-specific basis?

A. It can be done either prospectively or retrospectively by examining whether the company's supply plans and actual supply conduct met the standards established in the rule, whatever those standards are.

In some states they prefer preapproval. They prefer to have supply plan filings and approval in advance of each contract before it goes into effect. In other states it's retrospective purchased gas adjustments with reconciliation filings typically that address those issues after they've occurred.

But in either event, you can review the company's conduct relative to the standards and ascertain whether they've adequately met them.

Q. But if the -- how do you get company-specific applications from a generic rule?

A. Let's be specific and use an example if we can. If the rule says that the company shall engage in a level of risk management that's consistent with its customer mix and its -- let's say it says it should engage in a level of financial risk management using financial instruments that reflects its customer mix and it reflects the amount of price management it has through storage and through fixed price contracts. That's, then, a fact-specific question. how much storage do they have, how much price stability does that impart to the mix, what do they use in fixed price contracts?

You then make a judgment as to what portion of their mix should be using financial vehicles or financial products based upon the facts specific to the rest of their system. I would not want to see a rule that says, for example, 20 percent of all flowing volumes shall be collared with puts and call options because that number is much too rigid to account for the differences in individual systems.

Q. But how would you avoid the situation that MGE suggests we're in now; that is, that at the time they were acting, they had absolutely no basis for judging what the standard might be?

A. You're really going to a question of what's the best way to administer these kind of policies from the regulatory policy perspective. Is there something to be said for preapproval type of cases? Yes, I think there is.

I mean, there's lots of states that have gone through this route of saying, we're tired of prudence reviews, we're tired of these types of retrospective analyses. We want to have some type of preapproval process that gives the company and the commission and the customers more comfort up front that we're all in agreement and in alignment as to where the company should go on these issues. I think there's some wisdom do that.

Even if we don't take that approach, even if we say we're going to stick with retrospective analyses, just having the rule out there is already a statement of intent, a statement of direction that didn't exist in 2000-2001. So to the extent the proposed rulemaking becomes codified and implemented, then I think you already have more guidance than Missouri Gas Energy had.

Would I like to see that guidance increased? Yes, over time in case-specific applications, yes. But it already is a start, as I said, in the right direction.

Q. If you were going to do case-specific applications at -- I'm not clear on whether you've answered my prior question. If you're going to do it on a company-specific basis, at what time in the cycle -- annual cycle of purchases, storage, withdrawals are those company specific guidelines set?

A. I think I gave you an answer that says it depends, essentially, and the answer is just that. Some commissions choose to do it before the beginning of each heating season. Some commissions do it every two years before the start of a heating season. Some commissions choose to do it after a heating season or after an entire year is completed. There isn't a single answer.

My preference as an expert on regulatory policy is to have a process that gets these issues on the table before the critical decisions are made.

Q. And what part of the year is that?

A. Typically that's done in the summer months, some process that essentially reaches a conclusion before you get to October.

Q. What about opportunities or market conditions in February or March or even January before the heating season for which you're planning, does that mean that for those months the company would again be at risk for unknown standards?

A. I'm a little troubled by your comments about February of the heating season before, but --

Q. Excuse me. The February before the heating season. So that if you're planning the 2000-2001 heating season, you're making decisions to buy gas or not buy gas for that heating season in January of 2000, February of 2000, March of 2000.

At what stage does the company-specific application of the rule take hold and eliminate the uncertainty?

A. You never have complete elimination of the uncertainty to start with, because while you can have a process that says, we want to work collaboratively to establish a reasonable supply plan in advance of a heating season, how the company administers that plan is always subject to further review. So no matter how good the plan is, no matter how universal the agreement is with regard to that plan, it's always up to the company to actually implement that plan in a reasonable manner as well.

But apart from that, when I talk about a heating season, let's say October or November through April, what I have seen in other states is review processes that occur at some time in the June, July, August time frame for that cycle commencing two months later in October, to try and get some agreement around what supply plans are like.

Again, I'm not endorsing that as necessarily the right answer here in Missouri. That's a matter of regulatory policy and what the Commission and the companies are most comfortable with. But that just goes to what level of detail you put into the guidance. Having guidance is good. Having a common set of expectations is good, especially when you're dealing with issues that are this highly judgmental.

This is not a matter of there being a right and wrong answer. You're trying to substitute a regulatory process for the judgment of the consumer as to what their consumer preference is.

Q. Well, I'm going -- in those states where you're looking at June, July and August, do the companies stay out of the market in January, February, March, April and May?

A. No, they don't stay out of the market. They're obviously continuing to manage their portfolio to meet current demands and to meet storage refill and to buy liquids for liquid operations that they've got.

But typically you do go into a heating season with a setup for your plan for that season; for example, on storage withdrawals; for example, on how much you're going to buy month to month in the first-of-the-month market and then the mid-month market. Those are the kinds of things that are submitted in supply plans or biannual supply plans in other jurisdictions.

Q. Do you think biannual might be more workable?

A. That's the process in a couple of the northeastern states. And at one point in California it was triennial. It was -- so there's no single answer.

Q. I believe that in answer to a question from Commissioner Gaw, you indicated that MGE needed to enter the heating season with its storage full to get the full benefit throughout the heating season. Is that -- are my notes accurate?

A. To be sure of getting full use of its storage capacity, yes.

Q. To get full benefit throughout the heating season, won't they also need to -- from a price protection situation, need to operate their storage to ensure that there is some benefit remaining later in the season?

A. To get maximum price, I mean, that presumes a price curve that presumes that prices are going to be higher later in the winter than they are earlier in the winter. That presumption is not always true. So the answer is, no, you don't necessarily have to do that.

Q. Well, if you take storage heavily, say early in the heating season, are you assuming, then, that prices are going to be lower in the heating season, later in the heating season?

A. You're not making that assumption. Schedule for storage withdrawal is -- there's not a product price expectation. It's a product of the operational flexibility you need on the system in individual months, the supplemental supplies that that storage provides in other months. So remember that storage is providing a deliverability function or reliability function and a price management function.

So you're not scheduling storage withdrawals just to meet an optimal price curve. You're also scheduling it to meet the other two needs.

Q. But in its function as a price cushion, doesn't storage gas still need to be in storage in order to serve that function?

A. Yes, if you are only concerned with price management, with the price cushion effect, you would schedule storage in a manner that maximized the withdrawal value vis-a-vis what prices were at that point in time. Of course, you don't know what the prices are going to be month to month, and as I said, storage also is not solely or even primarily a price management tool.

Q. Again, in response to a question from Commissioner Gaw, I think you indicated that natural gas prices were higher in November and December than they had ever been; is that correct?

A. Up to that point, yes.

Q. At what stage of the 2000-2001 cycle was it apparent that 2000-2001 was not similar to the '98-99 or '99-2000 cycles?

A. I would say it was actually apparent even in October that it was going to be different. It was apparent in the summer months it was different, back up all the way to, let's say, June of 2000. In June of 2000 when the summer months -- of course, what you expect is that the summer months have lower gas prices than the winter months, but we actually had a situation in the market at that time called backwardization where the price in the winter months under the NYMEX strip was actually lower than the current summer months. So right there you had a very abnormal situation where the price curve was inverted summer to winter. The forward market was in backwardization.

As you go through, every month the profile looks different than it did the year before and the year before that and the year before that. People tend to forget that October was actually warmer than normal rather than colder than normal in the 2000-2001 winter.

So coming into November, the experience we had so far that heating season was the opposite of what it was going to turn out to be. So every month you can't say when it had become different. It was always different, and it was different because prices going into the storage cycle were different.

In fact, that's why so many companies actually chose not to fill storage was that they foresaw the market in backwardization and said, I'd rather just buy gas, flowing gas in December, January, February, March than to fill storage.

As it turned out, that decision was highly detrimental from an economic perspective. Missouri Gas Energy did not do that. Missouri filled storage, even though the market was facing a very steep crisis even in the summer months.

Q. So I notice that you talked about October being different from November, being different from other months. Is it true that financial derivatives are also timed on a monthly basis?

A. Financial products are -- they trade on a monthly basis, yes.

Q. Do LDCs make pipeline nominations on a monthly basis?

A. They make nominations on an hourly, daily basis, and then, of course, they get aggregated up to a monthly basis.

Q. Do they make nominations on a monthly basis as well?

A. Yes, as well as hourly and daily.

Q. Yes. Do they make supply commitments on a monthly basis?

A. Same answer. They make it on a daily basis, a weekly basis, a monthly basis, so multiple frequencies.

Q. Had measures of volatility of natural gas prices fallen or leveled off by mid November of 2000?

A. Depending upon the interval you're talking about for that comparison, they started by diminishing in 2000. By the end of 2000 they had increased, the levels of volatility had increased.

Q. Well, my question was about, say, in the -- in mid November of 2000, were there indications that the price of natural gas remained volatile or were there indications that the price was expected to either clearly decline or clearly increase?

A. Those are totally separate questions. The indications in mid November were that prices were volatile and higher -- had higher volatility than normal. As to whether they were going to trend up or trend down is a completely different issue than volatility. And I think on that issue there was clearly a lot of people who felt one way and a lot of people who felt the other way; hence the volatility.

MR. SCHWARZ: Thank you.

JUDGE WOODRUFF: All right, then. Redirect?

REDIRECT EXAMINATION BY MR. DUFFY:

Q. Mr. Reed, you were asked a question by Mr. Schwarz that had to do with your involvement in a Providence Gas case that appeared in your appendix or Attachment A to your direct testimony. Do you remember that?

A. Yes.

Q. If I remember correctly, that was because there was apparently some connection between that company and Southern Union Company.

A. We did discuss that, yes.

Q. Give me your understanding of what that connection, if any, was between Providence Gas and Southern Union.

A. That case -- I can only talk in general terms, because it is actually under seal, but that case dealt primarily with contracting decisions that one of the Rhode Island gas companies had made going into the winter of 2000-2001. So decisions it made prior to October 1st of 2000.

At the time those decisions were made and at the time the supply management activities were undertaken, those companies were not part of the Southern Union family of companies. The closing for that acquisition occurred later.

Q. Now, I think we also heard in an opening statement about -- something about a grasshopper and an ant and a Rhode Island decision. Did that have to do with that case that you just talked about?

A. Yes, it did.

Q. And can you explain that to me very briefly, what's the connection there?

A. In terms of the connection to this case, I don't think there is any.

Q. Well, before that, what was the connection between what was -- the grasshopper and the ant excerpt that was read, did that come out of some decision in the case that you talked about?

A. Yes.

Q. And that was in the Order that the Commission issued?

A. Yes. The Commission issued an Order that first discussed the Commission's views, and then basically, after providing that exposition, approved a settlement that had been submitted by all of the parties to the case. So it was a combination of both the Commission's views as well as separately an approval of the settlement of a gas cost reconciliation for the New England gas companies.

Q. And the point of that discussion in that Order, then, was apparently that the Rhode Island Commission was castigating that gas company and referring to it as a grasshopper that had frittered away the summer?

A. That was a characterization they made, yes.

Q. And so since you're presumably familiar with that case and you're familiar with the facts in this case, is it -- do you have an opinion as to whether it's fair to use that analogy in this situation? In other words, is it fair to characterize MGE as a grasshopper that frittered away the summer?

A. No, I don't think so at all. The facts there are very different and not applicable to what we have before us here. In that case the primary issue was how the company had handled storage in the summer in terms of its decision to fill or not fill storage.

And as I said, many companies, because the market was inverted in terms of the forward price curve, decided not to fill storage. So here, there's no question about the fact that Missouri Gas Energy, A, filled storage; B, was very active in the summer trying to address price management issues, risk management issues and bring those issues on multiple occasions before the Commission, the Commission Staff and the public. So I don't think there's any basis for trying to extend that analogy to Missouri Gas Energy.

Q. You were asked some questions about what has been marked for purposes of identification as Exhibit 17HC. Do you still have that document?

A. Yes, I do.

Q. I guess my question to you, after all of the series of questions that we went through, what do you think the Commission should take back with it in this decision-making process, if anything, from what -- from that document? What do you think this document really means or what does it show?

A. Um --

Q. What's the lesson to be learned, if any?

A. The take away that I have from the document really is similar to what I have in my testimony, which is that Missouri Gas Energy experienced a level of storage utilization in November and December -- and I'm not going to get into the numbers themselves on the highly confidential portion of the document.

But they got into storage utilization in November and December that was about 63 percent greater than they had anticipated. We note that. We also noted in my testimony that the industry as a whole experienced storage withdrawals in those two months that was about 70 percent greater than historical, greater than historic average.

I drew the parallel that it's not a case where Missouri Gas Energy was an outlier or a fringe performer here, that it was the only one facing the issues with regard to much greater than expected storage utilization.

The industry as a whole had 70 percent greater than historic levels. The company had 63 percent greater than expected levels. That's all a product of the same thing. It's a product of the actual demand conditions facing the industry and facing MGE during those two months.

Q. Did you mean to indicate in your earlier questions that MGE withdrew 70 percent of its gas in November?

A. No. And I think I may have actually used the wrong figure before when I was testifying before the break. The actual number for MGE was 63 percent greater than planned in November and December, taken together. I think I might have said 70 earlier. It's 63 percent. The number for the industry as a whole is 70 percent.

So, again, you can see that, if anything, the unanticipated use of storage or the extraordinary withdrawals from storage for MGE were no greater than and perhaps a little less than on a percentage basis the industry as a whole.

Q. So is there anything in what's been marked as Exhibit 17HC that indites Missouri Gas Energy as a bad performer?

A. No. It simply corroborates the point I was making in my testimony.

Q. You were also shown Exhibit 18, and I guess my first question with regard to that is, after you were taken through that document and asked questions about it by Mr. Schwarz, is there anything that you believe needs to be changed, any statement in MGE's prepared testimony in this case that needs to be changed as a result of that document?

A. No, nothing on this document would lead me to change my testimony.

Q. There was a discussion, I think, as to whether this was an accurate representation of the volatility of the weather in November. Do you remember that?

A. Yes.

Q. Do you believe that this graph on the first page of Exhibit 18 accurately -- fairly and accurately depicts the volatility of weather in November?

A. No. I think if the purpose is to compare November to January, I think the material presented here is incomplete.

Q. Why is that?

A. It does not address, as I said, the volatility of November relative to the mean values for November, and that is measured by the co-efficient of variation.

It also, as I said, doesn't address the asymmetrical issues associated with higher than expected or lower than expected demands. And as we said, the higher than expected demands are easily accommodated by withdrawing from storage. The lower than expected demands are not easily accommodated.

So it, A, doesn't capture what I would consider the most meaningful measure of volatility and, B, didn't capture the operational impact of the two types of volatility.

Q. So if you wanted to plot the volatility as you believe it exists, your graph would look differently than this?

A. Yes. I would align the mean for the two distributions and measure percent deviation from the mean.

Q. There were several discussions about the NRI and the documents that it has proposed or that it has promulgated. I believe in answer to Mr. Micheel's questions you gave us the titles of three of those documents. Are those the documents that you've relied on in this proceeding so far or are there others that are pertinent to this issue?

A. Those three are relevant. There's also a fourth document which is a slide presentation given by Ken Costello, the person who was conducting this research. That slide presentation is called State Commission Policies and Risk Management.

I think the most thorough review of the issues, though, is in the document entitled Regulatory Questions and Hedging in the Case of Natural Gas. That's also by Ken Costello. That's the February 2002 document.

Q. Commissioner Gaw asked you a series of questions and you got into a dialog about customer choice and the potential, I suppose, of having two tariffs, one for hedged and one for non-hedged, and then there was some discussion about hedging in a monopoly environment.

My question to you is, is there -- are there parallels or not to hedging in a non-monopoly environment?

A. Sure.

Q. What would that be?

A. You don't need to go any further than the corner gas station to see an example of a very competitive market, retail distribution of gasoline. Gasoline is also a very volatile -- and I say volatile from a pricing perspective, not from a plannability perspective. But from a pricing perspective, the price of gasoline is also volatile.

But do you see the corner gas station ever going out and hedging their gasoline supplies to try and provide stability to customers? No. Because what they recognize is customers choose to buy gasoline on a competitive basis at the prevailing price, and if you go out and hedge your gasoline supplies for a year or six months or even a month, what you're going to find is half the time you're above the market and half the time you're below the market. You'll sell a lot of gasoline when you're below and sell nothing when you're above the market.

Customers prefer in unregulated environments, and sometimes in regulated environments as well, to operate on an unhedged basis. And that's clearly demonstrated by the markets for those commodities.

Q. I believe you indicated that, based on your experience or what you'd seen in the states that had these dual tariffs, that the majority of the customers chose to ride the market; is that right?

A. Yes, that's correct.

Q. So whether MGE is a monopoly or not has no bearing on the hedging issue; it's a customer -- it's a customer driven issue, right?

A. Right. It's not a question of can we pass the cost through or a question of are there such things as preapprovals or prudence reviews. The answer is in markets regulated and unregulated, customers have different preferences with regard to the level of price protection they want.

Q. You were asked some questions by Commissioner Gaw, I believe, about what interstate pipelines are connected to -- or is MGE connected to, and I believe you listed Williams, Panhandle and Kansas Pipeline. If I mentioned the name Pony Express or Kinder Morgan, would that have any bearing on your previous answer?

A. Yes. I realized later that I had not included -- I should have included Pony Express, which is a member of the Kinder Morgan Interstate Pipeline Group, and there is a direct connection now between MGE and Pony Express.

Q. And do you know generally where the gas on that pipeline comes from?

A. Its source areas are in the Rocky Mountain basin.

Q. I think you were asked some questions about or your discussion led to a talk about design day criteria, and I believe there were some examples given about northern climate, and I know there was something about 85 degree day design criteria.

My question with regard to that is, have you done any kind of analysis or are you aware of what the design day criteria is for the MGE system?

A. No, I've not undertaken an analysis of actual or appropriate design standards for MGE.

Q. Do you, in fact, know what those are?

A. No. I've not attempted to familiarize myself with any of the reliability portion of the issues in this case.

Q. Back to the listing of the cases that you participated in, in Attachment A that you were asked questions about, do any of those listings reflect any recommended disallowance of gas costs of a gas company by you?

A. Yes. I've in many cases recommended substantial gas cost disallowances. In fact, my prior testimony in some states -- Texas is a good example, I think. I recommended the largest gas cost disallowance in the history of regulation in North America, some $450 million disallowed gas costs on the grounds of prudence in that case.

I've also recommended disallowances on the Northern Natural, on the Tennessee, on the Texas Eastern Pipeline system at FERC. So in many cases I've recommended, based upon the standards that are appropriate, very substantial disallowances where the conditions warranted it.

Q. So I take from that you're not a shill for the local gas distribution companies?

A. Certainly those that I've testified against don't feel that way.
Q. You got into a discussion with Commissioner Murray based on her questions about the Staff hypothetically challenging downside situations, and the comment, I believe, was made about, well, the Staff used no harm/no foul, and that, I guess, brings the question of quantifying benefits or credits to offset disallowances.
Does that have any bearing -- do you believe that has any bearing on how the Staff calculates that?
A. I don't know.
Q. Does that have any bearing on how the Staff has calculated the disallowance it proposes regarding this 30 percent standard in this case, do you believe?
A. Yes, it does. I have a serious problem with the way the Staff has quantified the disallowance for that portion of the case.
Q. What would that be?
A. As we discussed earlier, there are two months in which the Commission Staff found that there were disallowances appropriate because the level of hedging was individual in those months below 30 percent, and three months in which it went the other way.
The Commission Staff has specified, however,

that they think the minimally prudent conduct would have been 30 percent in each month.

If the company had, in fact, pursued the minimally prudent course of action of 30 percent in each month, the cost to consumers would have been higher than actually occurred. The Commission Staff is able to come up with a disallowance there only by looking at the months exclusively in which the disallowance is positive or the Commission -- I'm sorry -- where the company's actions led to higher costs and ignored the three months in which the company's actions led to lower costs.

That type of selective adjustment or imprudence, I think, is a direct contradiction of the standards in this state and the standards established in generally every state that I've testified in.

Q. Can you point to anything with regard to the standards in this state on that point that you're aware of?

A. Yes. That was an issue that was very squarely before the Commission in the Callaway Nuclear prudence case where advocates there were suggesting that they wanted to make disallowances in areas in which the company's costs were substantially above average, without giving them credit for areas in which their costs were substantially below average.

The Commission and, in fact, as I recall, the

Commission Staff took the position that that was not appropriate, but eventually the Commission considered areas of above-average performance and below average and netted the two out.

Q. You were asked some questions by Commissioner Murray about MGE's storage and its use of storage. I guess I just want to clarify, does MGE actually physically own storage or do they contract for it?

A. They do not own storage. They simply contract for it, and they hold that capacity to a contract holder. If the question went to ownership, I wasn't paying close enough attention.

Q. You were asked some questions on recross, I believe, by Mr. Schwarz about storage withdrawals in the months of November and December.

My question to you is, do you believe it would be advisable for MGE to hoard storage in November and December so as to have all of its storage then available in January, February or March, and can you discuss whether that's a good idea or a bad idea?

A. I don't think that would be appropriate, based on circumstances as they exist today. If you're doing that, you're depriving the company of the use of storage for that shock absorber effect that I discussed in my testimony. You're saying it's strictly a price or risk mitigation tool, not one that's really an operational tool.

If you do that, you're going to be facing very serious consequences in months in which, especially like November, you've got storage full and you have a warmer than expected day or week or warm snap.

And in those circumstances you're going to have a very difficult time finding a place to put the flowing gas that you've nominated in place of the storage lines that you had decided not to use in that hypothetical.

So I would not consider that conduct appropriate, and I think it would be something I would give very serious warning to anybody who wanted to take away that operational aspect of storage and say, let's use it just for price management purposes and nothing else.

MR. DUFFY: I think that's all I have.

JUDGE WOODRUFF: I have a couple of questions I just want to clarify, and I'll give the parties a chance to respond after I ask these.

FURTHER QUESTIONS BY JUDGE WOODRUFF:

Q. It came up from the redirect questions, you indicated that the Kinder Morgan pipeline was also connected to the Pony Express pipeline. Was that connected back in the winter of 2000-2001?

A. Yes.

Q. And then you indicated that you had

recommended, I believe, in Texas a large prudence disallowance. Who were you representing at that time?

A. I was representing the Texas Public Utilities Commission, or actually, technically, the general counsel of the Public Utilities Commission.

JUDGE WOODRUFF: That's all the questions I have. Is there any further recross based on those questions?

MR. SCHWARZ: None from Staff.

JUDGE WOODRUFF: Any redirect you'd like to make on that?

MR. DUFFY: I don't think so.

MR. MICHEEL: I do have one.

JUDGE WOODRUFF: Go ahead.

FURTHER RECROSS-EXAMINATION BY MR. MICHEEL:

Q. The Texas Public Utility Commission general counsel, that was an electric case, was it not?

A. It's a complicated case. It was Texas Utilities, but the regulatory action was a review of the gas purchases of Texas Utilities Fuel Company, which was an intrastate gas pipeline, and bought gas for the generator facilities of Texas Utilities.

Q. So that had to do with electric generation; is that correct?

A. The issues that I dealt with had to do with gas procurement policies and whether their purchases were prudent. Ultimately the gas was used in electric generation.

Q. So the disallowance would have gone to the electric company as opposed to a gas company; isn't that correct?

A. Yes.

JUDGE WOODRUFF: Redirect from that?

MR. DUFFY: Let me check. No.

JUDGE WOODRUFF: All right. Then you can step down. Thank you.

(Witness excused.)

JUDGE WOODRUFF: Call your next witness.

MR. DUFFY: Your Honor, is Mr. Reed free to leave the building if he wishes?

JUDGE WOODRUFF: He is free to leave. He can go on home.

MR. DUFFY: At this time we'd call Mike Langston to the stand.

(Witness sworn.)

JUDGE WOODRUFF: You may be seated and you may inquire.

MICHAEL LANGSTON testified as follows:

DIRECT EXAMINATION BY MR. DUFFY:

Q. Would you state your name for the record, please.

A. Michael Langston.

Q. Mr. Langston, are you the same Michael Langston that has caused to be filed prepared testimony, specifically what's been marked -- or what's been admitted as Exhibit No. 3, your direct testimony, Exhibit No. 4HC and 4NP, your prepared rebuttal testimony, and Exhibits 5HC and 5NP, your surrebuttal testimony?

A. Yes, I am.

Q. Do you have any corrections? Let's look first, I suppose, at Exhibit 3, your direct testimony. Are there any corrections or changes?

A. Yes, I do.

Q. Could you tell the Commission what those are?

A. First on page 17, on line 18, the next-to-the-last word in that sentence, "not," should be stricken. Also on Schedule MTL-16, the pages -- MTL-16, page 5 and MTL-16, page 6 are duplicates. Page 6 could be eliminated.

Q. I also noticed on page 4 at line 30 there is a number there of 1,141,000 regarding quantification of Staff's disallowance for the KPC capacity. That, as I recall, was the original number and the Staff subsequently lowered that due to some other calculations they've made.

Do you want to take a look at that and see if you want to change that number or you want to leave it where it is, reflective of what it was at the time the testimony was prepared?

A. At the time this was prepared, this was my understanding of the proposal. I think the Staff subsequently realized that, due to the status of an incentive plan, they credited the company with 30 percent of that amount to lower the number to what was stated earlier this morning.

Q. So with those changes -- well, let's do another one, or let's talk about another one. And that would be page 1, about by whom and in what capacity are you employed.

A. Yes. At the time this testimony was filed, that reflected the correct status of my employment. As of this morning, I am now an employee of Southern Union Company. I'm no longer an employee of Energy Works.

Q. With those changes that we've just discussed, are there -- are the answers -- or the questions and answers that appear in Exhibit No. 3 -- wait a minute. I've already done that, haven't I? Exhibit 3 is already --

JUDGE WOODRUFF: No. No.

MR. DUFFY: No. I'm sorry. That's what happens.

BY MR. DUFFY:

Q. With those changes, if I asked you the same questions that appear in what's been marked for purposes of identification as Exhibit No. 3, would your answers be the same as they appear therein?

A. Yes, they would.

Q. Are those answers true and correct to the best of your knowledge, information and belief?

A. Yes, they are.

MR. DUFFY: At this time I would offer into evidence Exhibit No. 3.

JUDGE WOODRUFF: 3 has been offered into evidence. Are there any objections to its receipt?

(No response.)

JUDGE WOODRUFF: Hearing none, it will be received into evidence.

(EXHIBIT NO. 3 WAS RECEIVED INTO EVIDENCE.)

BY MR. DUFFY:

Q. Now let's look at your rebuttal testimony, Exhibit 4HC and 4NP. Do you have any changes or corrections you wish to make to either of those documents?

A. Yes. In the attached Schedule MTL-29, which was the Staff recommendation in Case No. GO-2000-705, there was an attached Staff memorandum. Page 3 of 3 of that memorandum was duplicated twice. One of those can be eliminated.

Q. With those changes, if I ask you the same questions that appear in Exhibits 4HC and 4NP, would your answers be the same?

A. Yes.

Q. Are those answers true and correct to the best of your knowledge, information and belief?

A. Yes, they are.

MR. DUFFY: At this time I would offer into evidence what's been marked as Exhibits 4HC and 4NP.

JUDGE WOODRUFF: 4HC and NP have been offered into evidence. Are there any objections to its receipt?

(No response.)

JUDGE WOODRUFF: Hearing none, they will be received into evidence.

(EXHIBIT NOS. 4HC AND 4NP WERE RECEIVED INTO EVIDENCE.)

BY MR. DUFFY:

Q. Finally, let's turn to your surrebuttal testimony, what's been marked as Exhibits 5HC and 5NP. Do you have any corrections or changes to those two documents?

A. Yes. On pages 8 and pages 9, there are several numbers. The first on page 8, on line 6, the number that appears there on that line should have been designated as highly confidential, so there should be two asterisks added on either side of the number and underlined.

Similarly, the number that appears on line 17 should also be so designated. And finally on page 8 --

MR. SCHWARZ: 17?

THE WITNESS: I'm sorry. Line 7. I'm sorry. Page 8, line 7. And then finally on page 8, line 13, also that number should be so designated.

MR. MICHEEL: You mean line 12, don't you?

MR. DUFFY: It's line 13 on mine.

THE WITNESS: Then on page 9, line 6, the number in that line similarly designated. Page 9, line 7, the number in that line also so designated. Page 9, line 12, the number in that line so designated. And page 9, line 14, the number in that line to be similarly designated.

MR. DUFFY: Just so the record is clear, the copy that I gave to the reporter this morning contains those markings on the HC page, because we discovered after the fact that HC pages were -- had not been properly marked, and so the record does have the correct markings on it.

JUDGE WOODRUFF: Are those numbers in the NP version as well?

MR. DUFFY: It's a blank.

JUDGE WOODRUFF: Blank on the NP?

MR. DUFFY: So there's not a problem in the NP document, as far as I know.

JUDGE WOODRUFF: I was going to say, it's out there for the world if there were.

MR. DUFFY: There's not been a disclosure, as far as I know. Doug, do you have a problem?

MR. MICHEEL: I was looking at this NP version, and the lines are different on the NP version, as opposed to the HC version.

MR. DUFFY: And your NP version has blanks; is that right?

MR. MICHEEL: It has asterisks.

MR. DUFFY: Then I think we're okay.

BY MR. DUFFY:

Q. Okay. With those changes designating those numbers as HC on 8 and 9, if I asked you the same questions that appear in those documents this afternoon, would your answers be the same?

A. Yes, they would.

Q. And are those answers true and correct to the best of your knowledge, information and belief?

A. Yes, they are.

MR. DUFFY: At this time then I would move for the admission of 5HC and 5NP.

JUDGE WOODRUFF: Exhibits 5HC and 5NP have been offered into evidence. Are there any objections to their receipt?

(No response.)

JUDGE WOODRUFF: Hearing none, they will be received into evidence.

(EXHIBIT NO. 5HC AND 5NP WERE RECEIVED INTO EVIDENCE.)

MR. DUFFY: At this time I would tender the witness for cross-examination.

JUDGE WOODRUFF: And for cross-examination, we'll begin with KPC.

CROSS-EXAMINATION BY MR. KEEVIL:

Q. Good afternoon, Mr. Langston.

A. Good afternoon.

Q. I have just a couple of clarifying questions, hopefully, for you. In your direct testimony, you refer to a letter from Duke as an attachment to your direct testimony. I can't find the page now. Oh, here it is. Page 16 of your direct.

My question, at least my first question, would a -- well, first of all, Duke is not -- or at least that Duke is not an LDC; is that correct?

A. They're not a gas local distribution company. They have subsidiaries that are electric distribution companies, to my knowledge.

Q. Right. I should have said gas. Would a shipper which is not a gas LDC -- a shipper of natural gas, which is not a gas LDC, value pipeline capacity differently than a gas local distribution company?

A. Yes, I imagine so.

Q. Can you explain how or why that is?

A. Well, every customer's going to be a little bit different. A gas LDC is obviously going to focus on what its potential peak day demand is and what type of supply and transportation storage resources it needs to meet its -- its peak day demand. So to the extent that those resources are required, it's going to be looking to contract for the -- to have those resources available.

So, for instance, in this case for pipelines that means a lot of cases we have to contract for capacity year-round in order to make sure that that capacity is available to us.

For an electric utility customer, they may face a similar situation, although their needs may be in the summertime. An industrial customer may have a totally different scenario that they're looking at. So what their economic choices are and how they're going to value capacity, I would think, would be different from customer to customer.

Q. You may have answered my next question in the context of that answer. I think you said something about the gas company may contract on a -- for longer term than a non-LDC would. So would the same hold true for a shipper who was interested simply in a short-term capacity situation? Would they value pipeline capacity differently than a gas LDC?

A. Certainly.

Q. For similar reasons to what you gave a moment ago?

A. In the short-term market it is generally going to be totally price driven. So to the extent that an LDC is looking at their obligation to serve and their need to maintain reliability, those are factors they'll consider that a 30-day supplier's probably not going to be looking at.

MR. KEEVIL: Okay. Thank you, Mr. Langston. I think that's all I have for you right now.

JUDGE WOODRUFF: Counsel for City of Joplin is not here, so they'll be waiving their cross.

For Public Counsel?

MR. MICHEEL: No questions for Mr. Langston today.

JUDGE WOODRUFF: Staff?

CROSS-EXAMINATION BY MR. SCHWARZ:

Q. Mr. Langston, can you tell me if the prior witness was the same John Reed who prepared a report for Southern Union/MGE in February of 1995?

A. The John Reed who just testified was the owner of a consulting firm called Reed Consulting that was the firm that we retained to do the study that was in February of 1995 for some pipeline alternatives in Kansas City. I don't believe he himself personally prepared the report, but certainly the firm that he owned, managed did.

Q. Thank you.

A. Okay.

Q. Have you participated in any of MGE's general rate cases before the Commission?

A. I believe I have submitted testimony in a couple of the rate cases. I can't remember exactly the numbers.

Q. Are you aware in a general rate case setting what the normalization process is?

A. I'm aware that the attempt is to normalize all of the costs and to essentially reflect a normal operation and cost levels for the company to determine what the revenue requirement is, in order to determine what the allowed return is, so the company can design rates around that.

Q. So that's to take into account if a test year figure may not be representative on an ongoing basis; is that fair to say?

A. Yes. I think the intend -- I think you take the test year numbers and make an adjustment to get to what you consider a normal, ongoing planned level of expenses.

Q. Okay. In MGE's rate cases, does -- or is there an allowance made for the carrying costs of MGE's gas storage inventory?

A. I think the dollar amounts that have to reside in -- in the storage inventory are rolled into what's talked about as a working capital number. It's part of the overall funds required by the company to do business.

Q. Okay. And do the parties perform lead lag studies? Have you heard that term?

A. I think as far as revenues, expenses, those sorts of things, yes, they do.

Q. And does the seasonality of the natural gas LDC business affect the cash working capital requirements with respect to the fact that natural gas, flowing natural gas is delivered and then shortly thereafter invoiced and sometime after that perhaps billed to the customers?

A. Certainly the -- the supply costs are -- are calculated and billed on a monthly basis. Once you receive service, you receive an invoice typically by the 10th day of the following month, with payment due typically by the 25th day of the following month. Revenues, however, I think customers are normally cycle-billed. So, for instance, we have, I think it's 21 billing cycles throughout the month.

So as our meter readers go out, they'll read a certain number of meters every single day. So different customers will have different billing cycles. I'm not sure if that's answering your question. So the revenue side is going to be on a different collection billing cycle than is the supply cost, if that's all -- if we're talking about supply costs specifically.

Q. That's suitable for my purposes. You attached to your rebuttal testimony the testimony of Staff Witness James Bush in Case GR-98-140, did you not?

A. Yes. It's Schedule MTL-21.

Q. Right. And at the end of Mr. Bush's testimony, he has Schedules 1 and -- well, Schedule 1 is referring to some Williams numbers here, I believe?

A. That's correct.

Q. To your knowledge, are these planned numbers or actual numbers?

A. It's a combination of both.

Q. Okay.

A. In the top kind of series of calculations, it looks like there's one line that's stated to be planned and then there's three lines or rows that are, I assume, actuals, and then there's an average calculation.

Q. Okay. So that to the extent that those last three lines reflect actuals, it is safe to say that it doesn't represent any proposed plan by Mr. Bush; is that correct?

A. If you're talking about those single lines by themselves, that's correct.

Q. Do you have Ms. Jenkins' testimony with you?

A. Yes. Yes, I have it.

MR. DUFFY: Which one are we looking at?

MR. SCHWARZ: Her direct. I'm sorry.

BY MR. SCHWARZ:

Q. Schedule 7-4 and 7-5 are a series of heating degree days and summary thereof. Are you with me?

A. Yes, I'm there.

Q. Do you have any quibble with those as being true representations of what they purport to be?

A. I assume they are.

Q. You used them? You used her numbers in some of your testimony as well, did you not?

A. I believe so, yes.

Q. Would you turn to her schedule at 10-2, if you would.

A. Okay.

Q. Just above the last table, she has a note, there is no 1999-2000 reliability report. Do you see that?

A. Yes.

Q. I didn't see anything in your rebuttal or your surrebuttal to contradict that. Did MGE file with the Staff a 1999-2000 reliability report?

A. No.

Q. Mr. Langston, would you please tell me how MGE formulates its plans to use storage in the heating season months?

A. Well, you know, in general we look at what our flexibility is, you know, within the system. You know, we developed our plans essentially largely by experience but also by the flexibility that we have seen that we need, based on different scenarios that have arisen since we've owned the Missouri properties.

So, you know, primarily it's a look at what the total system demand has been by month, you know, as far as whether or not there was any period where there is any period where we can contemplate a peak day demand or we're outside a period in which a peak day demand can occur, even if we're still in winter period, what our flexibility is relative to injections, withdrawals, flowing gas, that sort of thing.

Q. Well, tell me a little about the mechanics of developing it. I mean, when, for instance, would you start developing the plan for the -- what year is this, 2003-2004?

A. Actually, I can't speak to when MGE may begin their planning process now. Let me refer to my experience, which would have been prior.

Q. Well, let's just say for 2000-2001, we might as well. When would that have begun?

A. Generally speaking, once we complete a winter, as of the end of March, we'll make an assessment where we are relative to any remaining storage balance we may have remaining in storage at the end of that winter, what our current supply contract situation may be, whether or not we have, for instance, term supplies that are under contract continuing for several more years or if we have to offer an RFP for storage -- I'm sorry -- an RFP for flowing supplies.

If we have to do that, then obviously that's the first order of business, you know, to outline what the supply shortfall is, when it's needed by month, what the deliverability is that we need, which pipeline systems it must be delivered into, those sorts of things.

Once that's identified, then we outline essentially a plan for our flowing gas both to fill summer -- summer storage, fill flowing volumes, as well as volumes to meet summer demands, where we are in that, because we also have to meet the tariff requirements that limit us on injection quantities based on how full storage is. For instance, early in the year we can inject a lot; later in the year we can't inject very much at all.

And then we also outline our flowing gas plan and storage withdrawal plans for the winter season. So all that generally begins in the April time frame and, you know, it was always our goal as of every year to have that completed, both the supply purchases plans and everything, by the end of June. Sometimes we made it; sometimes we didn't.

Q. And would you change the plan as, for instance, if the market conditions changed or weather predictions change, you know, El Nino's come, something like that?

A. As far as our planning, to make sure we had deliverability to cover -- if we're talking specifically in the wintertime -- to cover peak day, we always wanted to make sure that, you know, our analysis always showed that an actual peak day event could occur between roughly the middle of December through the middle of February. So certainly through January and February, we wanted full resources available to meet our total projected peak day demand.

Outside of that there were different levels of projected demand that could occur in the months of November and February, so we wanted to make sure we have total deliverability under contract and available for us to meet those demands. And that generally wouldn't change even if the seasonal -- you know, seasonal weather forecast can be warm but you can still have a peak day demand. So the -- generally weather forecasts are not very accurate the longer

-- the further out you get. So weather forecasts tend to be more accurate the shorter the term.

JUDGE WOODRUFF: Before you get into a new area, we're due for a break. So let's go ahead and take a break right now and we'll come back at 3:15.

(A BREAK WAS TAKEN.)

(EXHIBIT NOS. 19 AND 20 WERE MARKED FOR IDENTIFICATION BY THE REPORTER.)

JUDGE WOODRUFF: Okay. We're back, and you may continue with your examination.

And while we were off the record, you marked a couple of exhibits. Do you want to describe what those were?

MR. SCHWARZ: What has been marked as Exhibit 19HC, 1998-1999 reliability report from MGE, and 20HC is the 2000-2001 reliability report.

JUDGE WOODRUFF: Okay. You can proceed.

MR. SCHWARZ: Thank you.

BY MR. SCHWARZ:

Q. Do you have your surrebuttal testimony?

A. Yes, I do.

Q. Would you take a look at MTL-34?

A. Yes, I'm there.

Q. And is that the same basic data that Ms. Jenkins had in her testimony?

A. I hope so. Yes, it is.
Q. Looking down the January column, what is the coldest January for the 30 years of data?
A. For how many years of data?
Q. I know it's -- there's 30 years listed there, even though there's -- for instance, there's two 7s and two 6s and two 5s.
A. Oh, yes.
Q. But there's 30 years there altogether. I just want to know which in the January column is the most heating degree days?
A. 1,629.
Q. And that would be the coldest January?
A. Yes.
Q. Okay. And what's the warmest?
A. 841.
Q. Would you look at the November column and tell me what are the number of heating degree days for the coldest November?
A. 877.
Q. And the warmest?
A. 398.
Q. And what is the average or mean for that column of numbers?
A. Is that for November you're asking about?

Q. Yes, November.

A. For the 30 years of data it would be 677.

Q. And January, is that 1,185?

A. Yes, for -- for the 30 years of data.

Q. Can you tell me how the range is calculated?

A. The range is simply the width between the minimum and the maximum as compared to the average.

Q. The range, is not the range simply the largest number in the series minus the smallest number in the series?

A. Here on this table it's expressed as a percentage.

Q. Okay.

A. Were you asking me about this table specifically or were you asking me --

Q. Just generally.

A. Well, obviously range can be described in more ways than one, but, you know, you can either describe it as an absolute number or width of range, if you will, in a set of numbers or it can be, you know, what we described here as a percent of the mean.

Q. Did you get a copy of what had been marked previously as Exhibit 17HC?

A. No, I did not.

MR. SCHWARZ: May I approach the witness?

JUDGE WOODRUFF: You may.

BY MR. SCHWARZ:

Q. This is --

A. Yes.

Q. The top two tables are the numbers that I went over with Mr. Reed earlier, taken from his JJR-1, and I want to talk to you about the figures in the third and final table on the page. You have your rebuttal testimony?

A. Yes.

Q. Let me see if -- do the -- and I don't want to go in -- these numbers are HC, I believe. They've been marked HC. Can you tell me if the numbers in that first row comport with, I believe, the response to DR 28 that's attached to your rebuttal testimony?

A. Without adding up all the numbers in the schedule, it appears that they do.

Q. Okay. And in the second box there, the numbers that are recorded there as --

A. Actually, I'd also state that that row of numbers is reflected on page 9 of my rebuttal as well, what's shown as Table No. 2.

Q. Okay. And moving down to the row that's labeled as actual there --

A. Yes.

Q. -- are those the numbers that reflect the actual storage withdrawals for the respective months as reflected in Ms. Jenkins' direct, Schedules 8 and 14?

A. Yes.

Q. So assuming that the math is correct, the figures there are verified, are accurate?

A. Are you talking about the percentages?

Q. I'm talking about -- no.

A. The planned and actual numbers are, yes, correct.

MR. SCHWARZ: Could I -- well, never mind. Math can be checked by anybody, I guess.

I would now ask at this time that Exhibit 17HC be admitted.

JUDGE WOODRUFF: All right. 17HC has been offered into evidence. Are there any objections to its receipt?

Did you have an objection, Mr. Micheel?

MR. MICHEEL: I didn't, Judge.

JUDGE WOODRUFF: Okay. I saw you conversing with counsel. I wanted to give you an opportunity.

MR. MICHEEL: Thank you.

JUDGE WOODRUFF: Hearing no objections, then 17HC will be admitted into evidence.

(EXHIBIT NO. 17HC WAS RECEIVED INTO EVIDENCE.)

BY MR. SCHWARZ:

Q. Mr. Langston, why does MGE -- has MGE provided reliability reports to the Staff?
A. Typically because of stipulated agreements.
Q. I think you indicated earlier that no reliability report was submitted for 1999-2000; is that correct?
A. That's correct.
Q. Why wasn't it -- well, was one prepared internally, prepared for internal use at MGE?
A. No.
Q. Was --
A. Not in the form that had previously been provided to the Staff as a reliability report.
Q. Was one submitted for 2000-2001?
A. Yes.
Q. And was one submitted for 1998-1999?
A. Yes. They were under two separate agreements with two different sets of information to be included, but they were titled the same -- the same type of report.
Q. I have had marked the 1998 through 1999 reliability report as Exhibit 19HC. Have you had an opportunity to look at that, at least briefly?
A. Yes.
Q. Does that appear to be what MGE provided to Staff?

A. Yes.
Q. And similarly with Exhibit 20HC, does that appear to be the 2000-2001 --
A. Yes.
Q. -- report?
With respect to Exhibit 19, the '98 reliability report, would you turn to page 13, please?
A. Table I-1?
Q. Yes.
A. Okay.
Q. And in the 2000-2001 report, would you turn to page 10 in that at the same time?
A. Page 10, Table I-3?
Q. Yes. And those tables present essentially the same -- the -- well, let me ask you, what do those tables present?
A. This was the -- it shows three cases. The base case was the -- the forecasted normal demand level by month. The other cases represent a variation on that demand, which are low and high cases which are calculated based on either warmer than normal weather or colder than normal weather.
Q. Then in the '98 report, would you turn to page 16?
I did not -- and what is Table I-3 on page 16

of the '98?

A. Table I-3 is a calculation based on the assumptions we've used of the amount of contracted supply needed as far as entire month supply deliveries are concerned. It works in conjunction with a peak day table, which I believe Table I-4 on page 18, taken together, these two tables, the purpose of these tables is to identify the structure of contracted supply requirements that the company would enter into in order to conservatively be able to meet a reliable delivery requirement in each month.

Q. And if you look at Table I-3 in the month of November, what is the planned storage withdrawal indicated there?

MR. DUFFY: That appears to be an HC number, or at least we're talking off of a highly confidential page. I don't know whether it is still HC or not. So I would like the witness to make a determination whether it's HC or not.

MR. SCHWARZ: Thank you.

THE WITNESS: Let me just say, I think we've -- I don't think these are anymore. I don't know that that number's ever been released from this highly confidential designation. I don't know that I have concern about it.

BY MR. SCHWARZ:

Q. Let me rephrase the question. Is there an indicated storage withdrawal for November?

A. What this sheet is designed to do is to outline a minimal storage withdrawal number in order to calculate -- the purpose of this table is to maximize within, you know, a reasonable range the amount of contract supply needed. So the purpose of this is not to, you know, come up with an absolute plan of storage withdrawals, monthly flowing supplies, that sort of thing. This reliability report was produced in conjunction with the previous two as a result of GO-96-243, which came out of the incentive plan of GR-94-318.

And the concern the Commission had in approving this incentive plan was the fact that the company would somehow start doing short-term supply purchasing programs in order to try to maximize their opportunities under the incentive mechanism. So the origination of this reliability report was to show the Commission that conservatively we were going to go at a contract to make sure we had adequate flowing supplies to meet, you know, our -- our projected demand.

So the intention of these reports was to maximize the calculated amount of storage -- I'm sorry -- supply that we needed to contract for. And, of course, when you contract for supply, there's two issues. You have to have the daily deliverability that you project that you need and you have to have the access to the quantity of supply on a monthly basis. And that's the purpose of these reliability reports.

Q. And would you read the title of this table for me?

A. Projected Monthly Supply Requirements Average Monthly Demands.

Q. Base case?

A. Base case.

Q. I think you rescued me earlier on finding those. That is not the same number that appears on page 11 of your rebuttal testimony; is that correct?

A. Page 11 of my rebuttal testimony in Table 3?

Q. Yes.

A. That -- that is a reflection of the storage plan we used for the winter of '99-2000, and this is not the same time period, nor is it designed to be the same information.

Q. Understood. I'm sorry. It's not that -- and '99-2000, no reliability report was given to Staff; is that correct?

A. That's correct.

Q. So Staff would not have been aware of the figure in Table 3, then, would it?

A. They were in our responses to the ACA Data

Request.

Q. But it's not anything that, for instance, was --

A. During this time frame, in fact, continuing back to about 1996, basically when these reliability reports started being produced, the company contracted for a software, a monthly supply planning software called Send Out Software system. It's my understanding the Staff ultimately obtained the same software and, in fact, we normally, once our monthly supply plan was done, provided a copy of our monthly supply plan and send out runs to the Staff every single month, including every month in '98, '99, and, I believe, continuing into early 2000. So the Staff had access to exactly what our monthly supply plan was every month.

Q. Let me ask you this: The number for November in Table 2 on page 9 of your rebuttal, was that in the 2000-2001 reliability report submitted by MGE to Staff?

A. No. The 2000 -- the reports that followed -- beginning in 2000 followed out of a different case, GO-2000-705. And essentially a lot of information that had previously been presented, as well as the purpose of the report, took on a different function.

Q. So as far as reliability reports are concerned, the Staff never saw the number in Table 2 for

November, for instance, in the 2000-2001 reliability report, nor did it see the November figure in Table 3 in the '99-2000 report that was never submitted; is that correct?

A. Did you see it in a reliability report? No. Did you see it in other documents? Yes.

Q. But we did see the figure in Table I-3 in the '98-99 reliability report as well, did we not?

A. That is part of the reliability report.

Q. And we know Staff saw that?

A. I assume Staff looks at everything we send them. They seem to, in any event.

MR. SCHWARZ: I would ask that Exhibits 19HC and 20HC be admitted.

JUDGE WOODRUFF: All right. 19HC and 20HC have been offered into evidence. Are there any objections to their receipt?

MR. KEEVIL: Well, possibly, Judge. My -- I have absolutely no objection to the pages Mr. Schwarz has referred to, page 13 and 16 of 19HC and page 10 of Exhibit 20HC.

But since he's seeking to introduce the whole reports, if it's being introduced for the truth of everything that's in there, not knowing what's in there and having only received it a few moments ago and the documents being an inch or so thick, I would object to that. I don't know if the tables that he's gone through are all that he needs in or --

MR. DUFFY: I've also got a concern, not so much as to whether it's admissible or not, but more in the confidentiality range. I, fortunately or unfortunately, was involved in GO-94-318 and GO-96-243 and I did the -- we filed the first confidentiality or filed the first reliability report, and I remember distinctly at that time we were very concerned about who was going to be able to look at that because of very serious concerns about the parties to G0-94-318 getting access to this reliability report because the Commission created this thing at the very end of that proceeding on its own motion.

It wasn't -- it wasn't an issue in the case, and suddenly we're ordered to file all this stuff. And we said very clearly, okay, we'll give that stuff to you, Commission, but we don't want all these parties in this case looking at this material.

And so before we go too far here, I guess I want some assurance from my client, especially Mr. Langston here, that those confidentiality concerns, I think one of which was Kansas Pipeline Company looking at this material, whether those confidentiality concerns are now gone because of the passage of time or change in events, or whether we still have a concern about some people who could use the data in these documents to the competitive disadvantage of MGE.

I would like to ask Mr. Langston if my concerns are out of control here or whether there's some basis.

MR. SCHWARZ: Let me withdraw my offer, for the time being, and we'll discuss it with the parties off the record. I wanted to make sure that the witness had the opportunity to look at the full document, and --

MR. DUFFY: I understand that. And I guess I'd like to know, do I need to grab these copies that Mr. Keevil has and get them out of his hands at this point or not?

THE WITNESS: My understanding was that the Commission ultimately ruled that we would provide the reliability report to the OPC and the Staff and to no other parties. And that's been, I believe, the practice all the way up until the most recent one, which was July '02. So that would be -- that would certainly be my preference.

MR. DUFFY: Can the record reflect that -- that Staff counsel can retrieve these copies from Mr. Keevil?

MR. SCHWARZ: I don't know that I'm man enough.

JUDGE WOODRUFF: Any objection, Mr. Keevil?

MR. KEEVIL: We're not covered by the Protective Order?

MR. DUFFY: This -- this was a -- went beyond that. And the Commission -- we -- there were pleadings filed in this case and we specifically said, look, the confidentiality aspects of this transcend a Protective Order. This stuff is so sensitive in terms of competitive purposes that it doesn't matter whether, you know, it's classified HC or not.

That's my recollection from, lo, those many years ago. And the Commission agreed with us, said yes, those other parties had no business looking at the documents.

THE WITNESS: I think the main concern was that the company could -- could have a consultant sign an agreement and have that full access to the information, which was a concern. I mean, perhaps you-all can talk about just pulling those pages out or something. I don't think that would be a problem.

MR. SCHWARZ: Let me -- I won't collect them from MGE or OPC, but let me snatch them back from Mr. Keevil.

JUDGE WOODRUFF: Ultimately it's my decision, I guess.

MR. SCHWARZ: Well, if I'm not going to offer it, though.

MR. KEEVIL: I was going to say, I'll have a new objection to their admission if I'm not allowed access to the document.

JUDGE WOODRUFF: Since they're not offering it at this point, I'll grant that and allow them to snatch it back from you, as they put it.

MR. KEEVIL: I've already written on it. Of course, I only wrote 19 and 20. I wrote all sorts of confidential things.

MR. HACK: In disappearing ink.

JUDGE WOODRUFF: Okay. For the moment, then, 19 and 20 have been withdrawn from Mr. Keevil, and they've not been offered into evidence at this point. So we'll wait and decide further on when and if they are offered into evidence.

Are we clear on that, everybody?

MR. DUFFY: Thank you, your Honor.

JUDGE WOODRUFF: All right.

MR. KEEVIL: Would this help at all? I'll go back to my original offer. I have no problem with page 13 and 16 of 19HC and page 10 of 20HC, and I don't think those are the ones MGE was concerned about me having.

MR. DUFFY: I think we have to have a discussion off the record to determine if that's doable. If it is, then certainly that's a viable solution. If it isn't, we'll have to figure out some other way to deal with it. At this point, all I remember is there was very sensitive stuff in there, and I don't know whether that shows up on this page that we've just looked at or not.

MR. KEEVIL: The stuff on the page we just looked at was basically the same stuff we've got in the --

MR. DUFFY: I don't want to make a decision on the fly without having the opportunity to consult with the client and make sure that we don't inadvertently disclose something that we have tried to jealously keep secret for all these years.

JUDGE WOODRUFF: From the looks of it, we're probably not going to finish this witness today, so we'll defer decision on that until tomorrow morning.

MR. DUFFY: But we are glad to have whatever discussions off the record that are necessary to try to resolve this.

JUDGE WOODRUFF: You can certainly discuss it among yourselves as you wish. Can you go on to your next area?

MR. SCHWARZ: Thank you.

BY MR. SCHWARZ:

Q. If you would, sir, in your Schedule MTL-18 to your rebuttal testimony --

A. Yes.

Q. -- I want to say there is information beginning about two-thirds of the way through, headed WNG-2000 TSS Summer Injection Schedule.

MR. DUFFY: Can you hold on a second while we find where you are in there? This is in the HC material?

MR. SCHWARZ: Yes.

MR. DUFFY: In MTL-18?

MR. SCHWARZ: Yes.

MR. DUFFY: I have no idea where to look.

MR. SCHWARZ: Let me count from the back.

THE WITNESS: WNG-2000 SSS summer injection schedule. I've got that.

MR. SCHWARZ: It's about nine pages from the back.

MR. DUFFY: Let me find that. And I'm sorry, what is the heading I'm looking for?

MR. SCHWARZ: WNG-2000 TSS summer injection schedule.

MR. DUFFY: 2000 TSS?

MR. SCHWARZ: Yeah.

MR. DUFFY: WNG-2000 TSS summer injection schedule is 7/12/2001?

MR. SCHWARZ: Yes.

MR. DUFFY: Thank you. I just want to be on the same page.

MR. SCHWARZ: We are on the same page.

BY MR. SCHWARZ:

Q. And as Mr. Duffy indicated, there's what appears to be a date 7/12/2001. Is that when this report was generated?

A. No. That's simply when this was printed off the computer.

Q. The following page is the winter withdrawal schedules; is that correct?

A. Yes.

Q. And, again, the 7/12/2001 simply indicates when it was printed?

A. Correct.

Q. Do you have any idea when it was created?

A. This report, there's a group of columns on the left-hand side of the sheet labeled original plan. That essentially represents the plan going into the injection cycle, if you will. On the right-hand side, what's termed updated plan -- this document is maintained electronically, and essentially at the completion of each month, that month's actual is -- is entered and then the remainder of the plan would be updated.

You know, unfortunately we don't -- I mean, as it's updated, whatever that next month's number was gets replaced by what was actually occurring, and then, you know it gets updated every single month. We use this as part of the monthly supply planning process.

So this particular sheet would have been completed in November of 2000, as the month of October data was finalized. In other words, when the October data became actual, that's why the numbers on the right are highlighted in bold.

Q. Okay. But there's no record here as to when the original plan numbers were generated?

A. It would have been prior to the injection season.

Q. Sometime?

A. Right. We didn't date when we did that exactly.

Q. Do you have Ms. Jenkins' direct?

A. Yes.

Q. Would you turn to her Schedule 8?

A. 8-1?

Q. Yes. And would you agree that the figures under the company's -- under the company's normal monthly storage withdrawals are consistent with DR 28?

A. Yes, that's under Column C.

Q. How does the company determine the volumes that are listed in that column, the planned storage withdrawals? Strike that.

How did they do it in the year 2000-2001?

A. Generally for 2000-2001, we followed essentially the same plan that we utilized in the previous two years, with the addition that, as I think Mr. Reed alluded to, the October time period was warmer than normal. As a result, we found ourselves having excess gas flowing in October.

We had the same issues in late October as we did in -- as we would in early November with storage injection. So we entered into an interruptible storage arrangement with the Williams Central Pipeline to allow us to essentially inject more than our maximum storage quantity than we previously had contracted for.

So we had slightly a greater amount of gas in storage than we normally do on November 1st. So as a result, we slightly increased November by 150,000 out of, I think, we had 400-some-odd-thousand of incremental supply. But I believe that number has been removed from this number, you know, I believe was Ms. Jenkins' testimony.

Q. Flip back to Schedule 7-4, if you would, and in the November column, what is the smallest number?

A. It would be 398 in 1999-2000.

Q. 1999-2000. That indicates that November of '99-2000 was the warmest month in that series?

A.   Up to that time, yes, without going back further.
Q.   And -- never mind.
A.   That was a very low demand month for MGE for a November month. Frankly, we had another low November demand month in November of '01.
Q.   Could you explain for me how the company determines the level of first-of-the-month volumes?
A.   Normally we look at what our expected normal consumption is, if there's any reasons for us to change it or not. Generally entering into the winter we typically don't make any changes to, say, a November-type month unless we have some extremely unusual weather forecast or those sort of things. That's not normally the case in November.
If not, we go with what our, you know, normal expected demand level is for November. Then we look at what our, you know, storage plan is for the entire season, what our flowing gas, our contracted supply availability is, and, you know, match -- we make sure we have resources to match on a monthly basis that total demand.
Then we look at our peak day capacity availability under our supply contracts and our maximum storage available to make sure that we have enough coverage to meet the maximum single day heating degree day supply requirement that we may face in that particular month.

Typically on our monthly plans at the top we'll have, you know, a peak day coverage number which will tell us the number of heating degree days that that supply plan can supply, you know, within that month with no additional supplies contracted for.

Then we break down and we allocate those supplies and try to utilize the capacities and the supplies from the areas that are cheapest, you know, starting with the cheapest, moving up the line in cost, until we then match the level for first-of-the-month nominations.

JUDGE WOODRUFF: I assume you would like this marked as an exhibit?

MR. SCHWARZ: Yes, I would.

JUDGE WOODRUFF: It will be 21.

MR. SCHWARZ: I will note that the pages are marked HC.

JUDGE WOODRUFF: 21HC, then.

(EXHIBIT NO. 21HC WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

BY MR. SCHWARZ:

Q. I've handed you what's been marked as Exhibit 21HC, which consists of three MGE responses to Staff Data Requests, the first being No. 57, the second being No. 64 and the third page being No. 77. And I would ask you if -- well, strike that.

This is marked HC, and I would like him to read portions of this into the record, so I would ask that we go in-camera at this stage.

JUDGE WOODRUFF: All right. We are going to go into in-camera, then, off the Internet. Anyone who needs to leave, please do so.

MR. KEEVIL: Does that include me, Mr. Duffy?

MR. DUFFY: No, I don't think so. I don't think the same concerns arise here as previously.

MR. KEEVIL: Just wanted to make sure.

(REPORTER'S NOTE: At this point, an in-camera session was held, which is contained in Volume 3, pages 198 through 216 of the transcript.)

BY MR. SCHWARZ:

Q. Would you take a look at Schedule MTL-22 to your rebuttal testimony, please.

A. Yes.

Q. On the second page of -- it's not marked HC. Could you take --

MR. DUFFY: There isn't a --

THE WITNESS: There is a Schedule MTL-23.

BY MR. SCHWARZ:

Q. MTL-23. I'm sorry. I'm sorry. Is any of that -- I mean, it's not marked highly confidential that I can see. Is there anything HC on there?

A. I'm sorry. Not that I see at this moment.

Q. There's a column headed actual storage WACOG. Would you identify what WACOG means?

A. Weighted average cost of gas.

Q. And for the heating season of '99-2000, what was the WACOG for storage?

A. 2.48.

Q. And for the following heating season?

A. For 2000-2001?

Q. Yeah.

A. For November it was 4.23, for December 4.21, January 4.19, February and March had about 4.29.

Q. $4.20 more or less for our purposes?

A. Correct.
Q. So that would it be safe to say that for the same volumes of gas put into storage in the 2000-2001 period, compared to the '99-2000 period, that MGE's cash out of pocket would have been substantially more in 2000-2001?
A. As far as injecting into storage?
Q. Yes.
A. Yes.
Q. Would -- what's the -- what's the effect on MGE's cash flow of withdrawing gas from storage, as opposed to buying flowing gas to meet unplanned for demand?
A. Well, to the extent that you withdraw gas out of storage, well, you know, we file a seasonal PGA filing, purchased gas adjustment or tariff rate for our gas costs. So to the extent that that's what we're -- what we have filed, then that's what we're going to recover from the customers.

So the issue's going to be whether or not that filing included levels higher or lower, I mean, as the case may be as far as what the projected levels were, and it also depends on what the projected flowing price was at the time.

Obviously, if you have -- if you forecasted an average flowing gas price that's above your storage price, then if you're withdrawing gas out of storage, you're going to have an incremental gain, although if you've projected a flowing gas price that's below your average storage price, then you're going to actually have an additional incremental cost. But I'd say going into the winter particularly, the cycle billing lead lag issues far outweigh -- I mean, just the simple, you know, collection payments from a gas cost standpoint. Maybe I'm not really understanding your question here.

Q. The gas that is pulled out of storage, MGE has certainly by December already taken money out of its pocket and paid for that gas; is that correct?

A. Sure.

Q. So that by pulling gas out of storage, you will be delivering to customers gas for which MGE makes no further payment; is that correct?

A. That's correct.

Q. Whereas, flowing supply, if you deliver flowing supply to customers, then MGE still has to pay for that gas?

A. At some point.

Q. Right. So that if MGE pulls gas out of storage, it has a greater pre cash flow than if it nominates flowing gas; is that correct?

A. Well, and I guess my comment is, you're only looking at the cost side. When you look at cash flow, you're going to have to also look at what you're collecting on the revenue side, because your cash flow's going to be the net of those two.

Q. But your PGA is our PGA; is it not? The rate that you charge is the Commission approved rate; is that correct?

A. That's correct, but -- that's correct. My point is it depends on where the price is of flowing gas versus storage gas as to which way it benefits you. And on a cash flow basis, it also depends on what your revenue is that you're collecting under your PGA and what forecast was embedded in the PGA forecast, as compared to what you're actually paying.

Q. Well, what you're suggesting is, is that if your PGA rate is higher than the delivered cost of flowing gas, that there may be a margin, if you will -- I mean, if you were in the private retail sector, the difference between your cost of goods sold and the price that you're getting from the customer, that there would be a margin there? Am I understanding your answer correctly?

A. In simple terms, yes. You also have the lead lag of the cycle billing issues through the -- through that process, but yeah.

Q. Correct. And if you pull the gas out of storage, from a cash flow perspective, there are -- that gas has already been invoiced and MGE is free to do with that cash what it will choose; for instance, paying down the short-term debt that was used to finance the injection of gas into inventory in the first place?

A. Assuming that -- assuming it's collecting its money, yes.

Q. Yes.

A. Which is a big assumption this particular year.

Q. Yes. Understood.

A. So we actually didn't collect all our money this year.

Q. Do you have any idea how utilities do on collections relative to, say, other retail installment sellers?

A. You know, my knowledge is only what our situation was. I think we had about $4 million embedded in uncollectible expenses in our rates in this particular year, and I want to say our uncollectibles were on the order of 12 and a half million. So, I mean, we had 8 and a half million not recovered in rates. As a -- if you're talking about a percentage, I have no idea of what -- what normal losses or whatever are.

Q. In the competitive market?

A. I would assume it would vary significantly based on the type of issues you're talking about, whether it's mortgage delinquencies versus auto repossessions versus, you know, retail accounts, you know, non-secured versus secured. I'm sure it's all over the board.

JUDGE WOODRUFF: Before you go into a new area, it's almost five o'clock, so we need to stop for the day.

MR. SCHWARZ: I think that if given the opportunity to reorganize, I will probably be able to conclude briefly in the morning.

JUDGE WOODRUFF: All right. Very good. With that, then, we're off the record until 8:30 tomorrow morning.

Thank you.

(WHEREUPON, the hearing of this case was recessed until May 13, 2003, at 8:30 a.m.)

I N D E X

MGE'S EVIDENCE:

EXHIBITS INDEX

EXHIBIT NO. 11HC Surrebuttal Testimony of David Sommerer, Highly Confidential	11	
EXHIBIT NO. 12NP Direct Testimony of Lesa Jenkins	11	
EXHIBIT NO. 12HC Direct Testimony of Lesa Jenkins, Highly Confidential	11	
EXHIBIT NO. 13NP Rebuttal Testimony of Lesa Jenkins	11	
EXHIBIT NO. 13HC Rebuttal Testimony of Lesa Jenkins, Highly Confidential	11	
EXHIBIT NO. 14NP Surrebuttal Testimony of Lesa Jenkins	11	
EXHIBIT NO. 14HC Surrebuttal Testimony of Lesa Jenkins, Highly Confidential	11	
EXHIBIT NO. 15 Direct Testimony of Anne Allee	11	
EXHIBIT NO. 16 Surrebuttal Testimony of Anne Allee	11	
EXHIBIT NO. 17HC Withdrawal Tables	41	
EXHIBIT NO. 18 Historical Heating Degree Day Information	53	63
EXHIBIT NO. 19 Reliability Report	174	
EXHIBIT NO. 20 Reliability Report	174	
EXHIBIT NO. 21HC Data Request Nos. 57, 64 and 77	196	