BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE COMMISSION’S GATHERING OF INFORMATION CONCERNING NATURAL GAS OUTAGES IN THE SOUTHWESTERN UNITED STATES.

DOCKET NO. G-00000C-11-0081

OPEN MEETING

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AGENDA ITEM NO. U-21

ARIZONA REPORTING SERVICE, INC.
Court Reporting
Suite 502
2200 North Central Avenue
Phoenix, Arizona 85004-1481

Prepared for: By: COLETTE E. ROSS
Certified Reporter Certificate No. 50658

ARIZONA CORPORATION COMMISSION

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BE IT REMEMBERED that the above-entitled and numbered matter came on to be heard at Open Meeting before the Arizona Corporation Commission, in Hearing Room 1 of said Commission, 1200 West Washington Street, Phoenix, Arizona, commencing at 10:16 a.m. on the 2nd of March, 2011.

BEFORE:

GARY PIERCE, Chairman
BOB STUMP, Commissioner
SANDRA D. KENNEDY, Commissioner
PAUL NEWMAN, Commissioner
BRENDA BURNS, Commissioner

APPEARANCES:

For El Paso Natural Gas Company:
Mr. Jim Cleary

For Transwestern Pipeline Company:
Ms. Shelley Corman

For UNS Gas:
Mr. Michael Patten
Mr. Nathan Shelley

For Southwest Gas Corporation:
Mr. Justin Lee Brown
Mr. Bill Moody
Mr. Gary Clark

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APPEARANCES:

For NGS Energy:

Mr. Jeffrey Crockett
Mr. James F. Bowe, Jr.
Mr. Daniel E. Pastor
Ms. Deirdre J. McCaffrey

For the Arizona Corporation Commission Staff:

Mr. Steve Olea
Mr. Bob Gray

COLETTE E. ROSS
Certified Reporter
Certificate No. 50658
CHMN. PIERCE: We will now organize for Item No. 21.

Today we are here to talk about the incident that occurred in southern Arizona with the outage of natural gas and where that began and how it ended. And we are going from -- here basically is what we are going to do and what I have done. Here is how we are going to organize this so everyone knows. We are going to take in this order, and I want -- we are not going to have Commissioner questions. It tends to work well for us. I invite you -- we are going to take them eventually -- to write down your questions and let us go through a five to ten-minute presentation from each of the companies we are going to call on, go to public comment too, so that we have a perspective up here of where everything is. And then I think we can ask the questions that I think will be most useful.

I would invite -- and I see that Jeff Shaw is here, who is the CEO of Southwest Gas, and a number of folks from Nevada. Thank you for being here. By virtue of your being here, I recognize that you know this is important. And that's a good thing.

What we are going to do, we will have someone, whoever you designate from your company, or there may be more than one, when we get to questions I am sure you
are going to delegate that question to whoever can best answer. We invite you to do that. And some of you are going to have PowerPoint presentations, and we welcome that. But we would, to start out, like to take five or ten minutes, and it will go in this order: El Paso Natural Gas; Transwestern, these are our pipeline folks; UNS Gas; Southwest Gas; and then Natural Gas Storage.

And we would like to remind you we are just kind of wetting the whistle with what you have and letting public comment participators speak. And then we will get in depth, we will go back into your detailed presentations. So you don't have to take a lot of time here to start but something that you, in an opening statement, you would like to say, we would invite you to do that.

So let's begin with El Paso Natural Gas.

MR. CLEARY: Thank you, Chairman Pierce. My name is Jim Cleary. I am president of El Paso Natural Gas Company. And we would like to give an overview of our view of what happened on the cold weather incident and some ideas about how we can go forward.

CHMN. PIERCE: Mr. Cleary, you are the president --

MR. CLEARY: Yes, sir.

CHMN. PIERCE: -- of El Paso? Well, welcome to
you, too. I don't think we have met before.

MR. CLEARY: No, no. Glad to meet you, sir. I know you have met with some of my colleagues.

CHMN. PIERCE: Yes, I have. Thank you. Thank you for being here.

MR. CLEARY: Let me --

CHMN. PIERCE: We have them.

MR. CLEARY: Great.

On the first page, just to give you an overview of El Paso Natural, we are a large interstate natural gas provider, transporter. We effectively move gas from supply basins like the Anadarko Basin, San Juan, Permian. We take gas into our system from pipeline interconnects which might bring gas to El Paso Natural from the Rockies and we deliver to markets across the southwestern U.S. and Mexico. In Arizona we have nearly 5,000 miles of pipeline. We have 345 separate delivery meters. And we have 175 employees who are proud to call this state their home.

I am going to just talk for a minute. Let me just talk from the slides.

CHMN. PIERCE: Well, we can probably help with that, can't we, to make sure those move. Why don't we do that.

MR. GRAY: Yes, absolutely.
MR. CLEARY: If you have the presentation,

Commissioners, we are on page 2 or page --

CHMN. PIERCE: But it is helpful for the,
audience, especially those who might be commenters. But
they can see that. So as long as you, you can see the
screen, everyone, we should be okay. But we need to be
able to move that screen to click into the next slide
anyway. Thank you.

MR. CLEARY: Slide 3, please.

This slide shows in sort of an overview sketch
of the role of interstate pipelines in the gas delivery
system. Gas is produced by independent producers. Gas
is then -- typically in the Permian Basin and San Juan,
it goes to processing plants to remove various
substances from the gas to make it ready for pipeline
deliveries and ultimate consumption. It moves through
the pipelines and then ultimately to customers.

The key takeaway is that we are in the business
of transporting natural gas safely. The gas is
purchased by our customers. Our customers will tell us
where the gas should enter into our system, which could
be the San Juan Basin, the Permian Basin, wherever, and
where they want the gas delivered each day.

The key from operating the pipeline is the gas
supply in each day should equal the gas supply out
that's delivered to the market each day.

This is a picture of the El Paso Natural system.

And I will just note the major supply basins so you can orient:

The Permian Basin in west Texas, to the north of that would be the Anadarko Basin that we also access through our El Paso Natural system. The San Juan Basin in northern Mexico is a major supply area. And we bring in gas from the Rockies through various interconnects, interconnects with our Colorado interstate gas system in the east, with our Mohave system in the west, and with other independent pipelines coming out of basically north of San Juan.

So what did we see on the cold weather event? Clearly this is a weather driven event, record cold temperatures. We had record cold temperatures in Tucson, record cold temperatures in Albuquerque, 45 year record cold temperatures in El Paso, Texas. And that did several things. It increased the demand for natural gas due to the temperature. And we saw loss of gas supply. In the Permian area and in the San Juan Basin there were some freeze-offs, which are not uncommon in extreme cold weather, freeze-offs at the wellhead or gathering lines areas there.

In the Permian especially it was exacerbated by
power plants went out. And we had in Texas, I think ERCOT reported 82 plants went down due to cold weather, representing about 8,000 megawatts. What that did was a series of rolling blackouts on the ERCOT system and on El Paso Electric. El Paso Electric, by the way, is an independent company, not affiliated with my company in any way. That interrupted power to processing plants. When they were down, they had some freezing. When the power came back on, they had trouble getting back on. That resulted in less gas supply coming into the system. What we really saw and what was the driver of this event was on February 1st, 2nd and 3rd, significantly more gas was taken out of the system by El Paso Natural's customers than their suppliers were putting into the system. That resulted in a depletion of the line pack that we keep in our pipeline to effectuate deliveries. And with that, as the pressures in our pipeline declined on the main line, some of our distribution customers had trouble making deliveries to their customers, residents, residential customers, particularly at the far end of their systems.

And let me just point to a few numbers here that show you what happened. In Arizona, demand went up between, let's just look January 31st and February 2nd that is outlined, over that two-day period demand

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increased by 77 percent.

At the same time, if you will drop down to the supply line, Permian from the 31st to the 2nd supply dropped by 60 percent. What happened, you can see some market response at the pipeline interconnects, we saw our utility customers and distribution customers try to buy more gas to shore up the decline in Permian and San Juan production at different pipeline interconnects. This was gas that might have come in from the Rockies or other regions. And they were able to do so, but we still on a net/net basis had supply exceeding demand by 15 to 20 percent on each of those days.

So how did that gas get delivered?

CHMN. PIERCE: You say supply exceeding demand?

MR. CLEARY: Excuse me, demand exceeding supply.

Thank you.

How did we manage that? Well, we managed it through two assets. We have a storage facility as part of the El Paso Natural system called Washington Ranch. That has a maximum withdrawal capability of about 250 million a day. As you can see, on February 2nd, 1st, 2nd and 3rd that ran flawlessly. We were on full withdrawal and the asset worked just great.

The next line is the impact on our line pack.

Now, we have line -- gas in our pipeline that's kept
under pressure. And that was depleted. That was
depleted by about 700,000 a day on February 1st and 2nd,
700,000 over a three-day period. And when that
happened, we saw lower pressures on our main line
because there was no, not enough supply coming in to
replenish that pressure. And as we have lower pressures
on our main line, that's when our customers, Southwest
Gas, for example, had trouble making deliveries to their
distribution customers.

Briefly during the period we were -- our
response immediately was we had fully manned our
critical compressor stations. So we had people, our
technicians, there in case of any weather issues related
to those stations. We were in constant contact with our
customers. I mentioned Washington Ranch was on full
withdrawal. Our line pack, we held it as long as we
could, but with that inadequate gas supply coming into
the pipe, it depleted. Net/net, though, we delivered
every decatherm of gas that our customers put in on
those days and more, 15 to 20 percent more each day.

Let me offer a few suggestions going forward.

We are going to look at how we communicate with
customers and process plant owners and generators. But
I think one key takeaway is to see better integration
between the electric sector, for example, for the
electric utilities and generators to include natural gas facilities on their critical infrastructure list, not only pipeline compressor stations, but processing plants and other key production facilities.

Another suggestion, we do mock emergency several times a year. Our mock drill is usually focused on a pipeline scenario, one of our plants is out, one of our compressor stations is down. I think this event, to me, illustrates the need to have an end-to-end mock. That would be a mock scenario involving producers, processing plant operators, pipelines and distribution and utility customers. And there are ways to do that. We belong to an industry group called the Western Energy Institute. SRP is a member. Southwest Gas is a member. And I think a group like that would be happy to sponsor a look -- of using a mock emergency that would capture all segments of the industry.

We are going to take a look at our facilities, our key facilities. Storage performed just superbly but we are going to look at all 314 meters that we have in this state and make sure everything operated as it is designed, as is expected, and does it integrate well in an optimal way with our customers.

Finally, I think it is time to reevaluate storage. We have proposed in 2008 to expand our
1 Washington Ranch storage field by 100 million a day.
2 The 250 that we have now helped. 350 a day would have
3 helped more. We had proposed and actually my company
4 has spent, invested $40 million between 2004 and 2008 to
5 develop storage fields in Arizona. Now, and these would
6 be high volume salt cavern fields. Had either Copper
7 Eagle or Arizona gas storage been in place, it would
8 have been a huge benefit in dealing with this situation.
9 So we view that when we propose these projects, that
10 storage would enhance reliability. I think the events
11 of early February just underscore that.
12
13 Now, you may ask why didn't those projects go
14 forward after an investment of $40 million. These are
15 multi $100 million projects. And to get a project like
16 that done, you need alignment of market, you need
17 alignment of regulators, legislators and other public
18 stakeholders. For various reasons we just didn't get
19 there when we worked on this in 2004, '5, '6 and '7.
20
21 But I think the time to take another look at
22 this is now. And my commitment to this Commission and
23 to our customers is that we are ready, willing and able
24 to roll up our sleeves and get to work on evaluating
25 storage and doing what we can to move it forward, and
26 certainly looking forward to working with our customers
27 and this Commission on that.
1 CHMN. PIERCE: Well, thank you. And I think it
2 is ironic that the senator who was here was the former
3 representative who really put the dagger in Copper
4 Eagle.
5
6 MR. CLEARY: Well, perhaps we could have another
7 discussion about that off line. Thank you.
8
9 CHMN. PIERCE: I think so. All right. Because
10 I was there for that discussion. So were you,
11 Representative Stump, former Representative Stump.
12
13 Okay. Transwestern.
14
15 MS. CORMAN: Good morning, Chairman Pierce,
16 Commissioners. I am Shelley Corman. I am the senior
17 vice president of commercial and regulatory affairs for
18 Transwestern. And I just have a couple of slides to
19 share with you this morning.
20
21 First is a picture of the Transwestern system.
22 I don't think it shows up too good overhead. Oh, wait.
23 I have some copies here for you.
24
25 The Transwestern system carries gas supplies
26 from primarily the San Juan and the Permian Basins to
27 markets in New Mexico, northern and central Arizona and
28 the California border. Transwestern does not own
29 storage. We are connected to one storage facility in
30 Texas, the Keystone storage facility.
31
32 On this map you can see that we have 18 major
compressor stations. 75 percent of our compression is
gas fired, gas fired compressors. And the other
25 percent are electric compressors, electric motors
where we buy the power from the utility.
Turning to the next page, specifically in
central Arizona, we connect to six gas fired generation
facilities. We also are connected to two local
distribution companies with six active delivery points.
We do not reach into the southern Arizona area, into
some of the areas of the gas outages that you are
discussing this morning.

But we did think it was helpful to show you a
picture of what was going on in our system. And really
I will echo many of the same themes of Mr. Cleary.
During the recent winter weather we did experience
impacts on the Transwestern system. We didn't lose
power at any of our compressor stations. We had
capacity to serve our customers. And we continued to
make customer deliveries out of line pack, but we did
experience the same phenomena of loss of supply in the
system.

And this, Mr. Cleary showed it on a table form,
this is a graph form of the same sort of thing. What
you are looking at on this graph is the legend. On the
left-hand side is plotting in MMBtu the receipts and the

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deliveries on the system. And along the right side you
are seeing the pressure on the main line of the system.
This is not in the central Arizona area. This is along
our main line in New Mexico.

And you can see that for a period of time during
the gas day of February 2nd, nearly 400,000 more MMBtus
were going out of the system than were coming into the
Transwestern system. As a percent of Transwestern's
line pack on a good day, we have four bcf of gas in the
system. We started into the winter events on
Transwestern with about that amount of gas in the
system. So 10 percent more gas was going out of the
system than was coming in for a large part of the day on
the 2nd of February.

And like others in the industry, we are trying
to learn all the impacts. It was, that loss of gas
supply was split between the San Juan and the Permian
Basins. There were some anecdotal information that that
was power outages, that was freeze-offs, but we are
still trying to learn and work with all the interconnect
parties to understand what all the problems they
encountered in putting gas into the system.

Luckily, on the western part of our system in
the central Arizona and the California border areas, we
had good pressure on the system. We never fell below
800 pounds. But certainly our lower pressures on the main line were affected and impacted some of our other customers.

So in sum, really I will echo the comments of Mr. Cleary. For us it was primarily an impact at managing to serve our customers out of line pack during the winter weather of February 1st through the 5th. We don't have a storage resource to count on in the Transwestern system. And we did that by allowing customers to draw gas down out of line pack as long as we were able to continue to operate our compression, to push as much gas to the New Mexico and the Arizona areas to keep pressures up as long as we could.

Thank you.

CHMN. PIERCE: Thank you.

Okay. Now we will hear from UNS Gas.

MR. PATTEN: Good morning, Chairman Pierce, Commissioners. Michael Patten on behalf of UNS Gas.

As you know, UNS Gas serves portions of northern Arizona as well as the Nogales area. UNS Gas did not experience any retail customer outages or curtailments as a result of that cold weather event a few weeks ago. We did reduce the gas flow to the UNS Electric Valencia plant down in Nogales as a precaution, but that reduction did not have any impact on the UNS Electric...
customers either.

We have provided information to the Commission regarding our emergency plan and other questions that Commissioner Kennedy had. And we do continue to monitor events like this to help us prepare better for the future.

We thought rather than a presentation here we would have appropriate people to answer the questions you may have. And we have brought Mr. Nathan Shelley, who is the general manager of UNS Gas. We have Mike Flores, who is the manager of transmission and distribution engineering. And we have Theresa Mead, who is the lead analyst for gas transportation systems for UNS Gas. And we will be prepared to answer any questions that you have at the appropriate time.

Thanks.

CHMN. PIERCE: Thank you.

Okay. Southwest Gas.

MR. BROWN: Good morning, Chairman Pierce, Commissioners. Justin Lee Brown on behalf of Southwest Gas.

We welcome the opportunity to provide a brief presentation to the Commission, providing an overview of some of the already written responses that we have provided to some of the questions the Chairman,
Commissioner Kennedy, as well as Commissioner Burns has presented through letter format.

With me today is our vice president of gas resources, Bill Moody, as well as vice president Gary Clark, who is the southern Arizona division vice president. They will be providing an overview from a gas supply as well as the operations perspective on the weather related event of the 1st of February that others have already touched on.

Thank you.

MR. MOODY: Good morning. Is this on?

CHMN. PIERCE: Press the button.

MR. MOODY: There we go. Good morning, Chairman, Commissioners. I am Bill Moody, vice president of gas supply.

We are the utility of record. We had the customers out. So we brought both the supply and operations side. We will keep a brief presentation here but attempt to give summary answers to all the Chairman's and Commissioners' questions and the letters, and, of course, be happy to elaborate if this isn't enough information.

First off, we are here to discuss the loss of natural gas service to our customers in Sierra Vista and Tucson. And none of us wants a customer outage. In
fact, we all do, from the Commission through all of our companies, our suppliers, do a lot of planning around trying not to lose service. And we also do significant planning investment about service restoration. And we are going to talk about both of those things today.

We regret and understand, having been in the customer side of the business awhile, a customer without gas is angry. And that's the end of that story. You can't make him happy because you already took the service away. In this case, there is a lot of evidence. We feel like we reacted well to what we knew beforehand and afterwards, and we were a victim of this weather event just like our customers are. That doesn't dismiss their feelings on the matter because, when we put our corporate logo out, we understand we are providing a service.

I think the causes of the outages are pretty well established. And I am going to give some detail that some of you have seen in separate meetings about to put perspective around our Arizona weather event. This slide simply mimics what our pipeline suppliers have told us about the supply basins. And we experienced every single problem that they described.

Bentek is a research firm that does national and international gas research. And they sent a market
alert out after the event that kind of put in perspective what the production loss means to all of us in the gas community. 5.6 bcf nationally is 10 percent of the gas supply for the entire nation for a day. It is a big number. And a bcf of that was in the three basins where we purchased our gas for our Arizona customers. And so a bcf of gas loss means we don't know until afterwards when we go out to purchase that gas and perhaps even the sellers of that gas to us are not certain whether or not that gas will show up.

Think of this as a very real-time situation.

Hold on just a second.

COM. BURNS: I thought I had it already but it is different. So --

MR. MOODY: We have been morphing. We have some more copies if you need one.

COM. BURNS: I need one. Thank you.

CHMN. PIERCE: We have got one here.

MR. MOODY: Okay, okay.

CHMN. PIERCE: Thank you.

MR. MOODY: Thank you. This looks similar to the one you saw in your office, yes. Okay.

We now know the numbers greater than 50 -- this report was done very quickly afterwards -- but at least 50 power plants offline. And Texas experienced this
peak gas burn higher than any time in their history. In
the meantime, out here in Arizona and across New Mexico
we are having one in 60 year weather, which is beyond
any of our design parameters.

To put that in perspective, the green bar is the
one in 30 year weather event. I have been working at
Southwest Gas for 30 years and I can tell you that that
bar kept getting warmer for my entire career until this
year.

The blue bar is the actual weather if you went
to the weather service and looked. Then when we order
gas every day for you, our customers, we have a very
sophisticated modeling system that takes into account
humidity and wind, all the things that might affect how
cold a customer feels or how a dwelling may react to gas
so we know how much to order.

And that red bar really puts in perspective this
weather event. Those of you who are in Tucson, and my
compatriot, Gary Clark here, runs that division, when I
talked to him that day it was cold and it was windy, but
the words were you can't believe the wind. And that
proves it out. In Tucson, Arizona, we had 42 degree day
effective weather compared to a design or a 30 year
event of 35 and a half. That's a lot colder, not just
that little tiny red bar. And notice that Phoenix,
Arizona is at a peak as well. I had the opportunity to visit Phoenix. I never felt it this cold on that day when I was here. I lived here for awhile.

So the gas company reacts in the way that we can. Our gas buyers on February 1st, we see that the green bar is the gas we actually took. The blue bar is what we ordered or tried to purchase from our suppliers. And the red bar is what was scheduled. And scheduled means that supplier and pipeline and customer all agree that that gas was put into the pipe. Obviously the problem is the difference between the red and the green line.

But in answer to the Commissioner's question, did the gas company react to this event, you can see by the blue bar that we ordered more gas than we expected would show up to try and make the net/net be helpful to the pipeline as well as account for the cuts that we knew were going to occur in the basin. And in that blue bar it includes all firm purchases. And in some cases that was beyond the capacity we would normally own on our pipeline. So we actually purchased capacity from a seller so that we would have it firm all the way to our gate.

And then what happens is what was described by the pipes. They have a responsibility to tell both ends
of the pipe if the basin is not performing, either we
are not taking your gas in or, Southwest Gas, your gas
is not showing up.

Another issue that occurred was advanced
warning. And I want to assure the Commission we
absolutely had advanced warning. We watched the weather
forecast multiple days in advance. This was a classic
cold event, which it got colder as the day got closer.
The weather forecasts typically either miss one side or
the other, but, so we are always dealing with that. But
as I told most of you separately, you are paying us for
judgment. And we exercised our best judgment. We also
have 24-hour monitoring of our system. Distribution and
the inlet pressures that are at topic here this morning,
we understood what was going on there.

And then we also receive routine pipeline
communications. By tariff, part of the agreement is, if
we have a problem or, more importantly in this case, if
the pipeline is experiencing, there are a number of ways
we would learn the condition of our line. One is each
of the people involved in purchasing gas every day have
on their screen the ability to look at the line pack in
El Paso's line, in TW's line. They do that. That is
part of their gas buying process. They can see things
were happening.
At the same time the pipeline issues us warnings. In this case the SOC stands for a strained condition, which means the pipeline anticipates they may have a problem, and they signal customers. And we try to take action. And then it turns into a critical operating condition emergency, which is the worst possible condition, which is we are experiencing major difficulties of some sort. And those are typically described to us. And then we have ongoing constant communication that stretches from the pipeline through our gas monitoring facilities to the division.

Now, none of this meant outages were certain. We don't run out and turn people off on the guess that people may go off.

So now I am going to hand this over to Gary Clark, who is your vice president of operations for Tucson, to talk a little bit about what happened in the operating division.

MR. CLARK: Good morning, Mr. Chairman and Commissioners.

Southwest Gas does indeed have an emergency plan manual and a winter operations guide that we follow on a regular basis during the cold weather portions of our year. We attend the winter operations meetings that the Commission sets up around the October time frame. And
we take those meetings very seriously. And we look at our operations. We look at all aspects of our pipeline systems to try and ensure that we will have adequate capacities to serve our customers.

I will begin on the morning of February 2nd. At that time, as Bill has indicated, we were looking at the weather, we were looking at pressures from our telemetry systems on the pipeline and we were anticipating that there could be potential problems if there wasn't some recovery of pressures on that pipeline. We met together as a management team. We looked at our curtailment plan. And we instructed certain management people to make calls to customers and alert them of a potential curtailment.

During that process, many of our customers voluntarily who had alternate services went from natural gas to an alternate energy source. And at Fort Huachuca, the base cooperated with us and put out an order that all thermostats would be lowered to approximately 50 degrees during this cold weather event to help us out.

We took those steps. We also looked at some modeling that had been done previously that would enable us to see what would happen as our pressures and the demand on our system, if the degradation occurred that
we thought in this weather event would occur. And lastly, we implemented, per our winter operations plan, the process of having our field personnel out at critical facilities starting at 10:00 p.m. that night throughout the night to monitor and make sure there were no mechanical issues that would occur as a result of the cold weather.

In the morning of February 3rd then, we received our first alarm on our telemetry system in the night in the Sierra Vista area. And we recognized that in that area that pressures were dropping at a significant rate and that if it continued during the morning peak that there would be outages.

Similarly, in the Tucson area, on the Houghton Road system, this was the system that we were particularly concerned with, it services approximately 150,000 customers, and what you see in this graph is ultimately as a result of this event, the areas in blue are the customers that we ultimately lost as a result of not having enough capacity in our distribution system to serve them.

Immediately following the outage, we began the restoration of service to our customers. We notified the gas safety group of the Arizona Corporation Commission and let them know of both the Sierra Vista
event and the Tucson event and subsequently kept them informed as well as other members of the Commission of what was going on.

We made calls to our other operating areas in central Arizona, in the Phoenix area, and in Nevada and California and asked for assistance of getting personnel on their way to come to Tucson to assist in restoring service to our customers.

That restoration event began immediately upon the outages. We began by having to go and turn off meters to customers. And ultimately the restoration efforts, once they began, our first service restoration attempt was completed at all customers that were lost within two and a half days.

During this time period, we were very busy in communicating with various media resources to keep them alerted to what was going on during our outage. We immediately released news releases and ultimately initiated and responded to 376 media contacts. As a result of that, we communicated both in Tucson and Sierra Vista.

Now, it might be of interest that in Sierra Vista they have no television media within that community. And, therefore, in Tucson, we were providing information to Sierra Vista, to the Tucson media. But
it was not making it down to the Sierra Vista customers. So we relied heavily on giving updates to the Sierra Vista Harold, the local newspaper, and multiple radio stations in the area to keep them apprised of what was going on with our efforts.

We also participated in news conferences with the Pima County Office of Emergency Management. And in Cochise County, we were in constant contact with their emergency services manager and representatives of the public service agencies down there to keep them informed.

As a result of all of these efforts, we feel that, from a field perspective, everything went as we had hoped. Service was restored as quickly as possible. However, several recommendations have come out of this process. And briefly let me go over those recommendations.

We feel that we need to develop a system to capture field information regarding relight locations and estimated times. This would give our customers up-to-date information as per when service technicians would be knocking on their door. That was the single biggest concern that our customers had, when will you be at our house. And we feel that we will investigate and try to implement a system that will enable us to do...
that.

Secondly, we are going to look at the potential of predictive dialing technology. In Tucson, we were able to partner with Pima County's emergency management and use their reverse 911 calling system to put out a message to our customers. And that was a one time opportunity to put out a message to all customers within the outage affected areas. A predictive dialing system in-house would enable us to put out those messages on an ongoing basis.

We need to look at the correct way to utilize the spread of social media in our communications stream. We recognize that this today is an important opportunity for us to pursue and to see what opportunities are there, again, to communicate with customers.

We want to look at software which will update in an emergency, technology on our website so that that information is current and accurate and ongoing.

We need to look at implementing an on-call system for other departments that aren't affected in the outage, including some of our corporate staff departments, so they are available on an on-call basis to assist operations with technological needs and other areas.

Right now we have discovered that in our

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engineering area, our maps and information doesn't translate over to our customer service system. So we need to look at the potential of getting those two systems to talk to each other.

And lastly, we are going to look at implementing a notification system within house company-wide to ensure that all of our departments are aware of an outage in a particular area so they aren't scheduling maintenance of a critical system or anything else at the same time or in an emergency mode during an outage.

I will turn it back to Mr. Moody.

MR. MOODY: Moving forward, we have already had one debriefing session with our pipeline provider, El Paso, and have been in contact with our suppliers. Trust me when I say there is a big mess of bookkeeping on the back end of this. Every gas customer who was purchasing gas or selling gas into a pipeline was hitting their scheduling system. And we will be working through that for a long time to find out all the facts. But, more importantly, I wanted to make sure that you understood that it doesn't stop after this happens.

This weather event is clearly outside of our planning criteria. So our planning process says that we will take this weather event, which hasn't occurred in February in 60 years, we will put it back into our
planning processes. And it will directly impact our long-range forecast for volume that our customers may require, our firm capacity commitments on pipelines and infrastructure improvements. And that's probably the most important one. In a moment I will comment on storage. But also understand that we are in constant discussions with our pipeline providers. We build a system and they build a system and they have to peacefully interact in order to serve our customers.

So there is a lot of work that is going to occur from this. That's part of a routine process that we don't just do for winter preparedness. In my department we will do it ten years in advance because many of these projects are significant.

An example of that would be storage in Arizona. Now, I realize we are switching away a little bit from our customer communications and our gas purchasing. But this was a question on everybody's mind. It has been kicked around in Arizona for a long time.

As utilities we responded by forming the Arizona Storage Coalition in 2007. And as kind of the storage activity maybe lost a tiny bit of momentum, we are still all working on it. Commission Staff was involved. We keep them apprised. And generally this occurs following the Picacho Basin.
And political issues, I wish I was as eloquent as Mr. Cleary, on the ground, those political issues revolve around the important work ADEQ does. And brine injection is an issue, where we are putting water back into the groundwater. And I am not a scientist so I can't comment on that. I just know it is an issue. And then, of course, the municipalities that were affected by salt that was evaporated that needed to be stored somewhere near Eloy, they also were out there working.

So Mr. Cleary said it best. There is a lot of constituents around gas storage. But the question we were asked is would it have solved this event. And the answer, without being deflecting, is maybe. Generally storage improves reliability. I think every utility in the state is on record that it will improve reliability. The question is where will the next requirement be and will the hardware system adequately support that. But that should not slow us up from pursuing storage. We agree with everyone that gas in the state is an important asset. Many states are making that play.

Finally, I will conclude our discussion with just a basic picture. Those green lines represent El Paso's system in our state. And in a sense, in essence that red line plus the green line that comes down by the R in Arizona is where Transwestern would be.
Transwestern terminates out in that little red box. And that little red box represents the Picacho area. So all of our pipeline systems are around that area, and there happens to be salt there. I think that any of us who were -- you were -- a couple of Commissioners were in the legislature back in the days of Copper Eagle. That was quite a bit bigger political mess back in those days.

So that's what we are up against for something that we support and would like to work on over the next three to five years.

CHMN. PIERCE: Thank you. And we will get back to Southwest Gas with questions after we hear -- let's hear from Natural Gas Storage. Then we will have public comment.

MR. CROCKETT: Chairman Pierce, Commissioners, Jeff Crockett of Brownstein Hyatt Farber Schreck appearing today for NGS Energy.

NGS Energy is developing an underground gas storage project in this Picacho area that was shown on Mr. Cleary's slide as the Arizona Natural Gas Storage project located near Eloy.

I would like to introduce, if I could, some folks that are here with me today. Laura Luce is the president and CEO of NGS Energy. Chad Whited is vice
president of project development with NGS. Deirdre McCaffrey is the managing director of this project here in Arizona. Also with us here are Daniel Pastor, who is from Tetra Tech, who is involved with the permitting and environmental issues around this project, and then Jim Bowe, who is with Dewey & LeBoeuf, outside counsel. I am going to turn it over to them in a moment but I would just say a couple of words about this.

We have heard that natural gas storage or underground natural gas storage would have improved system reliability and would have certainly benefited the state in this outage that we have just been through. I would ask the parties and the Commissioners to consider the question if not now, when is the time for underground natural gas storage.

We believe that the circumstances exist today that are -- there will not be more favorable circumstances than exists today to get a project like this done. And we are working hard on this project in Arizona and we invite the parties to work with us toward the goal of having a more reliable natural gas supply in the State of Arizona.

With that, I turn it over to Dan, who has got a PowerPoint presentation.

MR. PASTOR: Thank you. I am happy to be here.
today talking about the Arizona Natural Gas Storage project.

Just a brief introduction. My name is Dan Pastor. I am a principal with Tetra Tech. We are a company that provides environmental and engineering consulting services specializing in the development of underground natural gas storage projects. And our purpose, our role in the project is to support the facility permitting, which is fairly extensive, to ensure environmental compliance, and we also support water management and geotechnical engineering for the development of the project.

And I have personally worked with NGS, which is the parent company to Arizona Natural Gas Storage, in the development of other projects around the country, specifically the Tres Palacios project in Texas, which was developed and in service at this time; the Leaf River project in Mississippi, which is currently being developed; the Windy Hill project in Colorado, which is also under development at this time; and, of course, the Arizona Natural Gas Project, which we have been working on for about two years now.

Just briefly, a quick summary of underground natural gas storage. I think most people have the idea how it works, but essentially it is cavern storage in
salt, so in a salt body that has suitable properties. There is the dissolving of a salt cavity for storage, which is then taken off of the interstate pipeline system, placed in the storage cavern and then drawn off whenever it is needed. It is done in a very safe manner. And it is widely used around the country.

There are about 400 natural gas storage facilities that store gas underground in the U.S., but none in Arizona.

So just briefly, why is it needed? I think we have talked about why the need is here. It is its reliability, flexibility and security. Storage can provide both supply and pressure to the systems to meet peak demand. And it also serves an important role in providing gas fired generation backup to renewables. So as additional renewables come on line, there is a need for gas storage and gas fired backup. And it also helps with the operation of the pipeline systems to make that more efficient.

In particular you can see on the graphic there are a number of states shaded in gray where there are no sources of natural gas within the state, and so the state is dependent upon pipeline service for its natural gas.

So specific to the Arizona Natural Gas Storage project, we have talked about the Picacho Peak Basin
near Eloy. That's where the project is located, about midway between Phoenix and Tucson.

And the facility itself, I wanted to give just a quick overview of what the components are. There will be eight storage caverns that provide a total capacity of 20 bcf. And that provides for up to one bcf per day of withdrawal capacity. Those caverns are shown here on the facility map with the green dots. And it may be difficult to see but there is a little brown halo around that, that circle. That's actually the diameter of the caverns where the gas will be stored underground.

In addition, there will be up to 22 brine ponds, which we will talk about a little bit later, and surface facilities, including gas compression to deliver the gas into the caverns and then redeliver it back to the pipelines.

This is gas fired generation, so not dependent upon any other source. We have plenty of sources of gas there at the facility. So it is not subject to emergency conditions, plenty of backup gas supply there.

The facility also has a water intake structure that will take water out of an adjacent canal. And then there are pipeline systems that connect this facility to the pipeline infrastructure.

And specifically they will -- the project
includes a nine and a half mile dual 24-inch pipeline header that runs up and would tie into the Transwestern and El Paso pipeline systems with pipeline laterals out to two power plants.

So just briefly, a question that we get all the time is how are these salt caverns created. And the way it works, it is pretty straightforward. Water would be taken from an adjacent irrigation canal. No chemicals are added to it. It is just injected directly into the salt bed, dissolves the salt just like you would dissolve table salt in a cup of water, saturates the water. And then that water is circulated back up to the surface where it is diverted to some solar evaporation ponds where the water can be evaporated.

Another question that we get a lot is why use evaporation ponds. Well, there is really only one other feasible option for brine disposal, which is deep well injection. From a technical standpoint, you can't discharge it to the surface. And we have looked at that option at the site and found that there are no suitable injection zones there at the site beneath the salt for that water to be disposed of. We have also looked at a potential zone above the salt, but there are concerns about disposal into that interval because it directly underlies the regional aquifer system and it runs the
risk of potential salt water intrusion into the aquifer system, which we can't have. And that would definitely be something that would be a concern to Arizona Department of Environmental Quality.

There is also an issue from a structural standpoint about injecting water above the salt in that it runs a risk of potentially damaging the cap rock structure on the storage vessel that you are putting the storage into.

So for those reasons we don't believe injection is feasible at the site. Therefore, we have gone to the evaporation pond options.

So the construction and operation of an underground natural gas storage facility is highly regulated both at the federal level as well as the state level.

The overarching agency for permitting of the facility would be the Federal Energy Regulatory Commission, which takes the lead authority on that. The ANGS project is in the prefiling process with FERC. We have been in prefiling for a little bit over a year at this point.

The other lead agency that gets involved at a federal level is the US EPA. They provide permits for the solution mining steps, so the injection of the water
to create the caverns. We have been working with EPA and have submitted an application for the last three injection permits for this site. And that's underway. Those permit applications have been in for about a year now.

There are other federal entities that are involved as well as state entities. So the Arizona Department of Environmental Quality has an aquifer protection program that we are working with them on to ensure that there is no leakage from any of the brine ponds or leakage from the well casing during the solution mining step.

One other interesting aspect of this project is that, given the size of the embankments for the solar evaporation ponds, we also have to engage the division of water resources for a dam safety protocol to make sure that we can construct those embankments safely and have a permit to do so.

We are also regulated by the Arizona Oil and Gas Conservation Commission as well as Pinal County Air Quality Control District.

A few other folks that are involved as well -- it is a long list of folks, and that's why permitting one of these projects takes quite awhile -- is the Arizona State Land Department is involved. There are
some properties there that the site would, the facility
would be located on. And then, of course, we go through
endangered species and the potential for any kind of
cultural resources in the area, to make sure we are not
going to have negative impacts on any of those resources
through development of the project.

So that's a quick summary of the project. Next
Jim Bowe with Dewey & LeBoeuf will talk a little bit
more about the benefits of the project from a commercial
basis.

MR. BOWE: Thank you. Good morning,
Mr. Chairman, Commissioners. Jim Bowe of Dewey &
LeBoeuf for Arizona Natural Gas Storage. And I want to
thank you for the opportunity to speak with you about
market area storage in general and the Arizona Natural
Gas Storage project in particular.

I think the reason my client asked me to appear
here is storage has sort of been my life, which is a
depressed, sad commentary. For the last 15 years I have
been involved in nearly 40 gas storage projects all over
the United States and elsewhere in the world, including
all the projects that Dan described as having been
undertaken by Natural Gas Storage, by NGS Energy.

First let's talk definitional terms. Market
area storage, which is what I am going to be touting for
the balance of my comments, in my mind is the storage
that is located relative to major load centers such that
peak day and peak hour requirements can be satisfied in
substantial part by storage withdrawals.

Ideally, market area storage is located in the
hearts of the market. It happens that the Arizona
Natural Gas Storage project which is planned for Eloy
would be located conveniently between Phoenix and
Tucson, in the heart of the Arizona market, providing
about as good a location for reinforcing the gas
delivery structure in the state as you could imagine.

What value does market area storage bring? In
other markets that have had the benefit of market area
storage for decades, California would be one example,
Michigan is another, the New England northeast states a
third, the availability of market area storage has
permitted long-haul pipelines to be sized to meet base
load requirements, average requirements instead of
having to be sized to meet peak requirements. Those
peak requirements can be supported in large measure by
gas withdrawals from storage facilities. That provides
real efficiency benefits in terms of pipeline design and
sizing.

Arizona has had the luxury of being able to rely
for its peak day and peak hour requirements on pipeline
deliveries without having the benefits of gas storage. But that has been to some degree a free ride that is coming to an end as the nature of gas demand in the marketplace changes.

And it carries risks to be reliant entirely on pipelines for deliveries on the peak day and during the peak hour, particularly in extraordinary weather events or in the event of infrastructure upsets, which can come not just because of freezing weather in the winter but because of a major power plant or group of power plant outages in this market in the summer.

I want to make sure that it is clear that the sort of excursion that this area had to deal with resulting from cold weather could just as easily result from the loss of a number of sources of supply into the market during the summer which could lead to a loss of a great deal of power generation. And the consequences would be pretty significant for the state.

The availability of pipeline capacity into the state that allows the state to meet its peak day and peak hour needs has really caused the utilities to defer committing to gas storage. And that's why we have been talking about this now for a long time. I have a sense of deja vu. I was here in 2003 in a gas storage conference convened by the Federal Energy Regulatory
Commission to explore the need for gas storage in Arizona shortly after FERC denied an application by Red Lake Gas Storage project for a certificate to develop a project up in the northwestern corner of the state. We have been talking about gas storage in Arizona since even before 2003. Here we are again. But, as my colleague pointed out, now seems to be the time for the commitments that are required to be made.

Where it exists, what does market area storage do? What does it allow the gas infrastructure to do? Over the short term and the near term, market area storage can support service on the peak day. It provides physical insurance against disruptions of flowing gas supply. And that, those sorts of disruptions can come from pipeline or compressor outages, from gas supply interruptions, as apparently happened in the Permian Basin, well freeze-offs, things of that nature. It can also compensate for sudden spikes in demand, gas fired generation suddenly being called upon in large quantity. It can provide overall system support so that a system in need of additional gas supplies, as was true in the Tucson area, could be supported in part by withdrawals and displacements of gas from a market like Phoenix that was better supplied.

Over the longer term, market area storage
permits more confident reliance on gas fired power generation. Given the load fouling characteristics of gas fired power generation, it is the source of incremental generation for the foreseeable future in this part of the country.

The availability of market area storage permits more efficient operation of the long-haul pipeline systems, of the local distribution systems connected to them, and of the regional energy infrastructure, including gas fired power plants as a whole. Over the longer longer term, having market area storage would allow more efficient sizing and operation of the long-haul transmission systems.

So, overall, having the availability of market area storage would improve the overall reliability and security of the energy infrastructure in the state. So over all periods, having market area storage in place would offer a physical hedge to gas LDCs and power generators and to other major consumers of natural gas.

There are price benefits as well, which I won't get into now but would be happy to speak to. Having the availability of storage in the heart of the market allows you to be a little bit less of a price taker than would be true if you had to go to the market in the peak hour for an additional source of supply. And it also
allows you to reduce your exposure to being long gas and having to dispose of it when there is an opportunity to store the gas rather than sell it at fire sale prices.

So there can be real gas cost benefits as well, but here I want to focus more on reliability and security as one of the major virtues of having market area storage. And this is not new. This is something that has been recognized in a lot of other markets, as I mentioned, California, Michigan, the northeastern states, and most recently Alaska.

I am working on a gas storage project in Alaska. It would be the first one in Alaska being developed in recognition of declining deliverability into the Anchorage and Kenai Peninsula area. The Alaska, or Regulatory Commission of Alaska had to wrestle with some of the same issues you have to wrestle with having never had gas storage in the state and has approved the Cook Inlet Natural Gas Storage Alaska project to support deliveries in the Anchorage and Kenai area because of the benefits market area storage provides to maintain system reliability and stability.

Arizona has been discussing this, as I said, for a long time. I went back and looked at comments that were filed with this Commission in 2003 by El Paso Natural Gas and, at that time, Copper Eagle Gas Storage.
The same essential points were made in the presentations that El Paso filed with this Commission and made today. I point out in particular that it is generally recognized that where market area storage is available the customers can meet their peak needs through storage withdrawals, and that would allow for more efficient and cost effective and reliable satisfaction of market needs.

I wanted to see if we can go to one slide just to give you a sense of what graphically having storage close to the market can mean. Obviously having storage close to the market here would have helped. I think there is no real disagreement among all the participants in this proceeding.

I wanted to show you something that I had personal experience with. This is a salt cavern gas storage project called the Southern Pines Energy Center located in Mississippi, very close to the Florida market. There were two hurricanes back to back in 2008 just a few months after this facility went on line. In fact, it was just barely operational. The two major excursions down, or the major withdrawals from the storage facility, for three days this storage facility, which had emergency backup power generation, was on line and able to supply half a billion cubic feet a day to

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the Florida market in place of offshore platforms that had been shut in and processing facilities that had been shut in. The pipeline that was supplying Florida, Florida Gas Transmission, actually wrote a thank you letter to my client for having actually been there and having kept the system up.

Half a billion cubic feet would be what this project could do, as it is currently designed, to inject gas right into the heart of the market.

Just recently, just last week TransCanada Pipelines lost a main lane in its northern Ontario system. That reduced the deliveries to eastern Canada and northeastern United States by several hundred million cubic feet a day. The system was able to respond with gas storage located in Michigan and in Ontario and in the northeastern U.S. to maintain service to all of the major markets, including the New York City market which is supplied in part by Canadian gas.

Having storage close to the market was the difference between a problem and a very serious problem for one of the most populated areas in the United States.

So perhaps that is enough to make the point that market area storage can really make a difference and could have made a difference in the excursions that Arizona dealt with February 1st, 2nd, 3rd.
Now, why haven't we gotten there yet in Arizona?

Well, there are a number of reasons. One, it is expensive. No gainsay in that. Developing underground gas storage, particularly in this part of the country, is costly. It is technically challenging; although, we are confident in our ability to overcome all those technical challenges. And, in fact, contrary to what has been suggested, we have not encountered any significant opposition to the use of brine evaporation ponds for the management of brine that would be produced in the development of these caverns. That is simply not a correct characterization of the situation.

These things take a long time to develop, which leads me to my final point. What is required is commitment. This project will take two to three years from the time it receives its permits to get the first cavern in place and be able to inject the first decatherm of natural gas.

We need contractual commitments from the market in order to proceed. This is not a cost free exercise. It is a risky exercise. In order for in infrastructure improvement to be undertaken, the market has to commit. And as is true for any long-term relationship, really, commitment is critical. The customers need to execute long-term agreements for services that the project would
provide. They need to be confident that they won't be
second guessing making the long-term commitment to gas
storage. They need to be confident that they will be
able to recover the costs that they incur in subscribing
to gas storage. All of those things are critically
important for the customers.

So, to close, what needs to happen and permit
this project to happen? All stakeholders have to place
value on the insurance policy that market area storage
would provide. All need to recognize that the free ride
that Arizona has enjoyed on the pipeline systems is
essentially over. It just should not be acceptable to
go forward planning on continuing to depend entirely on
growing pipeline supplies given the consequence of
having those supplies not be available. Market area
storage can hedge against that.

The LDCs and power generators need to be
encouraged to plan for the future. They need to be told
that if they do so and they prudently commit to capacity
in a market area storage project, they won't be second
guessed having made that commitment. They need to be
able to recover their costs.

With the contractual commitments that we have
been discussing with the Arizona Storage Coalition for
more than a year, in hand with this Commission's support
and with the continued cooperation of El Paso Natural Gas, which has been very cooperative with this project in the past, the Arizona Natural Gas Storage project can result and in about three years can provide the kind of insurance that this state really requires for its gas delivery infrastructure.

So we are prepared to go. We are well advanced in the FERC permitting process. With the support of the market, with the support of this Commission, we can move that process even more quickly, and we would like to get on with it. Thank you.

CHMN. PIERCE: Thank you.

Okay. What we are going to do is we are going to take a break in just a minute. But I only have Dan Pozefsky from RUCO from the public. Are there any elected officials here -- we invited some -- that would like to give public comment?

If not, Dan, if RUCO would like to, we would like you to be able to come up and make your public comment, and any other members of the general public that are here. And then we will take a break.

MR. POZEFSKY: Thank you, Mr. Chairman. Daniel Pozefsky -- by the way, good morning, Commissioners, Mr. Chairman. Daniel Pozefsky on behalf of RUCO. I have got some very short comments. I shouldn't hold you

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up too long on the break.

We have been also informed from the various folks who have been talking, some of them about what has been going, so we have been following it, too. And, of course, we are very concerned, especially about the outage. In fact, we were really surprised at how vulnerable ratepayers are under the circumstances here, which really amounted to what I would say is a slight change in climate, which if it was in another area that was equipped for it, we wouldn't even be having this discussion.

But it does raise the issue. And, you know, it brings to mind that certain things probably should be done, such as the things we are talking and discussing. And we look forward to that discussion.

I did want to say on something that -- a comment. And I heard it alluded to in the El Paso presentation. And that is that we think at least, at the very least, at this point that the Texas PUC should put national gas plants on the critical infrastructure list so, when there are rolling blackouts or there are rolling brownouts, our utilities don't get power cuts, because when plants go down, it affects the interstate supply of gas. So we think that that's something at the very least that we should be thinking about anyway.
And that's all I have. Thank you.

CHMN. PIERCE: Thank you. And that's Dan Pozefsky with the Residential Utility Consumer Office.

What we are going to do is we are going to take a break and give the court reporter an opportunity for a break. But at the same time, when we come back, because there will be questions, and we can get into some deeper presentations, although I think people pretty much made them, but what I would like you to do, if we could, is make sure we have everybody who made presentations, let's get close to a mike, use the tables that are here, because Commissioners are on the board with all kinds of questions I am sure, and we would like to do that as efficiently as possible. Then we will go to 12:30. And then, if there is more to go, we will take a lunch break and we will come back. Okay?

All right. We will take a ten-minute break and then you will be first up.

(A recess ensued from 11:30 a.m. to 11:50 a.m.)

CHMN. PIERCE: Okay. We have three of us here.

Here is what I would like to do, and if we could hold it to this. We have an order on the board as far as how everybody has weighed in. And what I would like to do, instead of having any of us go too long, what I would prefer is each of us as Commissioners maybe take
five minutes, then pass it on to the next one. Then I
will just come right back in that order, if that works
for everybody, until we are done. We will get to
everybody's questions but I would like to give everybody
a chance to take a breather and let someone ask a
question. Will that work? All right.

Here is the order: Commissioner Newman,
Commissioner Stump, then me, Commissioner Burns, and
Commissioner Kennedy. And that's established strictly
how fast they got their finger on the button. We will
start with --

COM. STUMP: Like Jeopardy.

CHMN. FIERCE: I don't know if someone wants to
continue a presentation. That is not my agenda that
way, but I really felt like you abused my ten minutes,
some did not, and that you have said quite a bit. So
let's -- and I know we have, we have Commission Staff
here.

Thank you, everyone, for being here.

So if there is a question for Staff or if Staff,
if they hear something and they need to make the record
clear for us, if you would please join in.

Commissioner Newman.

COM. NEWMAN: Thank you so much, Mr. Chairman.

Good afternoon -- good morning -- good afternoon
to everyone. I appreciate this briefing. Thank you, Mr. Chairman, for scheduling this hearing.

The first thing -- the reason why I am going first is, of course, my name is Paul Newman. I am aka Fast Draw Eddie Felson and a very good hustler pool player. So I got my finger on the button.

The first thing I would like to say is that all of these presentations show that the energy system in the United States is a system that relies on other systems. And we are an integrated system. And it was a unique, well, it was a unique weather event. That many plants going down in the midwest, the power conditions in the midwest were something that I know that all the regulators in the country are very concerned about.

I just came back from a meeting in Washington where this was a subject. Although we didn't have extensive conversations about, about what happened here, there were extensive conversations, as you know, about San Bruno and other issues, other safety issues on the pipeline that sort of have a higher priority in terms of true safety for lives in the country. But this is certainly, because it is an incident that occurred on our watch in Arizona.

And as some of you may know, I represent southern Arizona, or at least I am from southern
Arizona. I represent the whole state but I am the one Commissioner who lives in Tucson, was a former Cochise County supervisor and lives in Bisbee and knows the Sierra Vista area very well. So I am very -- I know a lot about the neighborhoods where it went down, talked to individuals that were affected. And it is a serious thing.

The biggest complaint that I got was the turn on period, as how long it took to turn on. And the first question I have, there seems to be a discrepancy. I believe the representative from Southwest Gas, I forget who it was, could have been Mr. Clark, could have been Mr. Moody, but there seems to be a discrepancy about whether or not everything, all power was turned back on between -- in two and a half days. I thought I heard a statement that said that it was two and a half days.

I also have in hand a copy of an Arizona Daily Star report. And, by the way, I was down in Tucson during this period, so I experienced all these conditions. And I have not -- my gas didn't go out because I don't live in the Foothills. I live in central Tucson. But there is a discrepancy between this two and a half days and what I have seen some reports of as long as six, seven days before power was turned on.

Is that the truth, that it took six or seven
days? Which is the true statement?

MR. CLARK: Okay. Mr. Chairman and Commissioner Newman, my name again is Gary Clark. And let me try to address that question.

When a natural gas outage occurs, three things need to happen. Firstly, we have to go and visit every home and literally turn the meters off so that there is no opportunity for an unsafe condition to take place within that home. Once all meters are off, then we must go back and purge the distribution system and ensure that we have 100 percent natural gas back in that distribution system. And then once that purge is complete, then we begin our relights. That's where our service people go to each home, knock on the door and restore service to our customers.

What we are seeing, Commissioner, is within that two and a half day window, both in Sierra Vista and Tucson, that we had made our first attempt to knock on every door and restore service to customers. It is our policy that after that first attempt we begin immediately thereafter and make a second pass and knock on every door that customers weren't home the first time, and then we make a third pass. If a customer hasn't been home for all three of those knocks on the door, then we leave a door tag. We give a specific
number for that customer to call and our call center is then alerted when that call comes in that they immediately dispatch a technician because they recognize that that customer is within the outage area. And that technician then is immediately dispatched to that customer's home to restore service.

Specifically to answer your question, there could have been customers who waited longer than the two and a half days because they weren't home and we had to go through the first, second, third. And then they were required to call in. And it could have been we had customers that were gone for the weekend perhaps on vacation during this event and, when they got home, they saw a door tag, they called and service was restored.

But by and large two and a half days is when the first time we knocked on every door took place.

COM. NEWMAN: Did you do a content analysis in the Sierra Vista and Tucson areas as to -- or did you have time or manpower to do a sort of an analysis of how long it took for you to get two-thirds of the houses up, or do you have any graph or information regarding that, or can you provide the Commission with that material at another time?

MR. CLARK: That will have to be, Commissioner Newman, that will have to be provided at an additional,
at an additional time. I don't have that data right in front of me, but we can get it, yes.

COM. NEWMAN: That wasn't one of my original questions that I put to you, but it just -- I want to, I want to understand this discrepancy and to have a content analysis of -- it is not that many folks. It could be done, I know. So I am asking for that.

MR. CLARK: Okay.

COM. BURNS: On the second issue, with regard to storage -- where is my storage gentlemen? Right there -- there is a long history of debate about storage. I haven't been here for all of it. I have only been on the Commission for two years. But, ironically, in one of my first meetings after I was elected two years ago, I met with El Paso Gas officials.

Where is the El Paso folks?

MR. CLEARY: Right here, Commissioner.

COM. NEWMAN: There you are. And I was told -- their lobbyist at the time was Mr. Ober from Policy Development Group, eminent lobbyist, former chief of staff of Senator DeConcini. And a gentleman who I don't see in the room today who was the western representative for El Paso came to me and said after years of exhaustive study El Paso was actually looking at a potential of putting storage in the same general area of
the Picacho Basin. And I was rather surprised by this visit. And it was one of my first, as I said, one of my first meetings.

But it was categorically said to me by El Paso what looked like the same general area of this Picacho Basin -- it is not really the Picacho Basin; it is, the peak there happens to be Newman Peak, believe it or not -- right below Newman Peak, and not named after me, but I was told categorically that they spent, made good efforts, spent I really don't know how much money but when corporations tell me they made good efforts, I imagine it is into the millions of dollars, and they said they couldn't figure out a way to get gas storage there because they were concerned about potential pollution, if you will, of the groundwater in the basin.

Now, what does El Paso have to say to me about that? Is there anyone here qualified to talk about that?

CHMN. PIERCE: Speak into the mike, please.

MR. CLEARY: Sure. Mr. Chairman,

Commissioner --

CHMN. PIERCE: Just go ahead and slide it over.

It will move.

MR. CLEARY: Let me take a stab at that.

I, Commissioner Newman, was not in that meeting
at that time; although, I was president of El Paso
Natural Gas and president of the Western Pipeline Group
at that time.

I don't recall it that way. I think what I
recall was our conclusion, after spending, and the
number which I mentioned in my presentation, $40 million
for two storage fields and in doing some test wells in
the Picacho area, that we were concerned about the
ability to inject the solution brine back into deep
water reservoirs due to the geology. And I think that
was the tenor of the comment, that we couldn't figure
out a way to do a traditional storage field where you
take the solution mining and inject it deep. That led
us to explore. And I believe NGS has this view that the
correct thing to do is to, when you remove the brine
water from the solution mining, to put it in evaporation
ponds. And so I think that's the way we saw it. And I
will let NGS comment as to whether they see it the same
way.

CHMN. PIERCE: Okay. And after we do that we
are going, if you don't mind, Commissioner Newman, we
will jump to Commissioner Stump.

COM. NEWMAN: Gary, just one more question, not
on this issue. I just want to make --

CHMN. PIERCE: No, we are going to come back.
But we are almost ten minutes and I wanted to keep it five.

COM. NEWMAN: It is hard for me. There are a lot of questions.

MR. PASTOR: I just wanted to confirm that was the finding of ANGS' detailed investigation of the subsurface, that there is not a suitable brine injection zone for underground disposal.

COM. NEWMAN: Okay.

MR. BOWE: I might add that although, as Mr. Cleary mentioned, the traditional approach to developing salt cavern storage is to dispose of produced brine through deep injection, that is not the only way. It is done, it has been done by use of surface evaporation ponds both in this country and in Europe successfully.

I expect that this month FERC will certificate another salt cavern gas storage project to be developed in Utah called the Magnum Gas Storage project. It relies upon surface evaporation ponds.

While in the best of all worlds you would dispose of your brine underground, the use of surface evaporation ponds for a variety of different purposes is well understood. There are a lot of them around Arizona and elsewhere in the west.
COM. NEWMAN: Okay. I guess, Mr. Chairman, you would like to move on now?

CHMN. PIERCE: Yeah. Then we will come back.

Commissioner Stump.

COM. STUMP: Thanks, Mr. Chairman.

I have argued for years that we need natural gas storage in Arizona. And perhaps in the face of crisis, the opportunity arises to move forward in this regard.

And for the sake of the public that may not be aware of the history of this, what has occurred so far, could someone please outline for me the history of attempts to establish storage, what have been the obstacles, why has this not occurred, and, secondly, what we as Commissioners can do, as you see it, to help make this happen.

MR. MOODY: I can certainly give you the utility point of view of that. Of course, the first and most important thing that occurred was this Commission established our opportunity with the preapproval or the infrastructure policy statement that we believe serves any kind of infrastructure policy. And all of our developers of potential projects are very well aware that we can put a project together and bring it to the Commission.

So in our history we have looked at individually
as customers. And I am going to be loosely speaking for
my fellow utilities. We don't know everything each
other does, but, honestly, serving the customers of
Arizona, we work fairly closely together. And a project
this big is going to take all us for to play in order to
pay to it.

We went through -- El Paso had two or three
separate offerings. The various storage providers'
representatives in this rooms, some who have spoken,
some who have not, made presentation. We looked at LNG.
We looked at aboveground compressed storage, kind of
everything that was available out there. And naturally,
when there is no reliability issue, cost is a problem.
And what we tried to do was, A, you want to pick a
storage project that you believe can be completed as
stated, and, B, is a good economic deal for your
customers. And that would lead us to come to the
Commission with preapproval. So we believe that on the
Commission's side as cohorts in this that we already
have that structure in place in order to present a
reasonable project.

The Arizona Storage Coalition works diligently,
that's all utilities in the state, works diligently with
each project within the confines of we can't do prices
and we can't do volumes because we have got national law
against us on that one but we can certainly talk about
the projects and understand them as a group so that it
is simple to make sure that we get something we really
like.

And then, finally, the developers, I believe --
now, a lot of this data is anecdotal so you don't want
to take any of it to the bank, but everybody who is in
the State of Arizona recalls what happened when Copper
Eagle first came up. We were actually hearing that a
temperature inversion would asphyxiate us all. I mean
that's how far out of control it got.

So there is a large constituency outside of
this, am I going to be able to see the salt, is salt
poisonous, is it making my groundwater bad. And that's
the things that people who produce permits and do
political lobbying have been attending to.

I have been on this job, this particular job,
now for seven years. And we have been talking about
storage for six years of it. So it is a difficult nut
to crack, and everyone you have heard from in this room
you have spoken to in both of those arenas.

Is that adequate?

COM. STUMP: Yes. I appreciate that. And it
sounds as though the takeaway from today, too,
Mr. Chairman, Mr. Moody, is that one does see a greater

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alignment of stakeholders and potential markets based on
the event that occurred earlier this -- in February.

MR. MOODY: Absolutely.

COM. STUMP: And last question for now,
Mr. Chairman, with your indulgence: How key was
Washington Ranch in averting even a worse disaster? I
know it stayed on maximum withdrawal mode to offset loss
of customer supplies. But could you outline briefly the
role that Washington Ranch made in averting an outcome
that could have been worse?

MR. MOODY: Chairman, Commissioner Stump, may I
send that question to the El Paso folks?

COM. STUMP: Yes, of course, of course.

MR. CLEARY: Mr. Chairman, Commissioner Stump, I
think it is a matter of degree. The shortfall we faced
on February 2nd and 3rd was about 600,000 and change of
decatherms. When I talked about our line pack being
depleted, it really took over a two-day period 700,000
decatherms of line pack diminution, that is without
being restored, to provide to hit low pressures, which
of course created problems on the Southwest Gas system.
During that period, we had 250 a day coming in from
Washington Ranch.

So I think the short math is that had Washington
Ranch not been operating at that level, you would have
seen probably a day quicker or maybe a day and a half quicker. And they would have been more severe. You know, we could model it if you are really interested in it but that's my quick accounting look at the answer.

COM. STUMP: Mr. Chairman, Mr. Cleary, had there been natural gas storage in Arizona at the time -- I recall you were one of the speakers -- it was unclear as to how that might have mitigated in the specific circumstance.

MR. CLEARY: I think --

CHMN. PIERCE: I would keep going in order.

MR. CLEARY: -- the exact impact of storage perhaps is not -- we haven't done the modeling. But, again, to look at the rough numbers, the storage projects that I had on my chart in the market area were between 400,000 and 900,000 and change of deliverability.

Again, think about the problem was, on our system, was the line pack being pulled down by about 360,000 a day. So taking the Arizona Gas Storage project, or at 400 million, I think that would have shored up significantly. It would have put us in a line pack neutral mode and, in my view, on a broad look, probably would have averted the problems. We would have to model it to give you a precise answer, but if you say...
the premise is ins and outs have to equal on the
pipeline, that would have gotten us there.

COM. STUMP: Okay. Appreciate it.

CHMN. PIERCE: Thank you.

And I am -- I want to talk about some of the
letters I have gotten from our constituents, your
customers. There is a lot of frustration amongst those
who -- and there is frustration amongst those who would
blame it on Commission rules concerning green energy,
that we are not doing other stuff in energy efficiency
requiring that you use less natural gas. So all of the
interpretation and the understandings of these policies
are in question. And I read things and I think, gosh, I
need, I need to respond to a lot of these e-mails and
letters. But there is so much to explain on how we
work.

And so I have sympathy for what you have been
trying to go through, because I realize that the public
just wants service, uninterrupted service. That's what
they want. And some of them, well, they want damages,
you know, and -- but here is why. Here is a statement:

It would seem that the ACC should require at a
minimum that each utility have a well thought-out
customer notification system in place in advance that
would include media and all appropriate public safety
and other relevant entities in the event of service
disruption of any size.

I am wondering if we couldn't put in place a way
to, and this is for Southwest Gas, just as, and I have
used this example before, just as when there is maybe a
four-alarm fire and every neighboring fire department
comes, it is all hands on deck, couldn't there be an
agreement between Southwest Gas, UNS Gas, and other gas
providers that have personnel that, in an event like
this where we are going to have several days of people
without natural gas, is there a way to speed that
process up, and when we take -- to put all those assets
together from all parts of the region that we can get
them to and get them together, and then, knowing what
the assets are, using all the technology that I have
heard that you want to put in place so the people will
know, you know, when am I going to get turned back on?
The primary question, they want to know when am I going
to get turned back on.

And the second one is is the company doing
everything in their power. Now, the company feels like
they did everything in their power. But I think in the
future, if there is an incident like this, we ought to
have some system in place to borrow assets, people, to
get this job done.
Is that something that is feasible?

MR. CLARK: Well, Chairman Pierce, Southwest Gas echoes your concern of keeping gas flowing into the meters. We want, above all else, to see those meters continue to spin all winter long. And so when we have an outage occur, it is of greatest and utmost concern for us as a company.

We talked a little bit about some of the technology that we are looking into to notify our customers. May I regress just for very briefly and talk about an incident that occurred in Phoenix just a year ago in which there was not a totally similar situation, but there was an outage where customers' regulators had to be replaced and therefore they were taken out of service and then service restored.

As short ago as a year, the social media did not play the type of role that we found in this particular incident. This caught us, I guess to be honest, by surprise. And we are looking into every aspect we can of our communications to customers to ensure that we can answer that all important question, when will we be knocking on your door to restore your service.

In this outage, we did something that we haven't in the past done. And that is typically in an outage in the past, we would turn every meter off. Then we would
purge the entire system. And then we would begin the
relight process. And in so doing, we could predict a
little closer than in this particular case.

What we did here in an expediency of time was to
have meters turned off in one area, the purging process
begin as we were still turning off meters in another
area. And then relights began in that first area while
we were purging in a third, or the second and turning
off meters in the third. We thought this was more
efficient. And indeed it got meters back on, in our
opinion, quicker than if we would have gone to the old
method.

We had over 100 people from our company in the
other states and in central Arizona join our work force
to handle this outage. We felt that that was an
efficient number of trained personnel to handle the
situation that we encountered efficiently and
effectively. However, we do have agreements in place
with sister utilities that we can call upon to assist us
as a mutual aid situation when this situation occurs.

Let us take a good, hard look at what we did in house with our own personnel, how we
could have perhaps brought in other people, if that
would have been more efficient for us. We feel we were,
we exceeded our expectations in getting our customers
back on in this situation. So we will take a good, hard
look at that, Mr. Chairman, and see what is that fine
line balance that we need between safety, efficiency and
restoring that service to our customers.

CHMN. PIERCE: Thank you.

Commissioner Burns.

COM. BURNS: Thank you, Mr. Chairman. I guess
three main points.

The first is that I know we don't have the
people who are affected. The customers are not here
today. It was a long drive. They won't be able to
come. I don't know if there will be a future hearing of
this kind or not.

But just for the other Commissioners, I would
sure like to work with you and see if we could find some
way of funding some sort of interactive system where
they could have gone at least to a place in Sierra Vista
and Tucson and we could be actually talking to them and
hearing from them and would like to work with you on
perhaps on doing something like that. And if they were
here, you know, then we would actually be hearing from
the people who experienced it.

And when I heard that, I called a couple people
I knew in the Sierra Vista area because I wanted to know
what they were experiencing. And when I listened, I
don't remember if it was Mr. Clark or Mr. Moody said,
you know, you already have got an unhappy customer
because they don't have their service that they want --
that was Mr. Moody that said that -- well, that's true.
However, I really got the sense from a lot of them that
they just wanted to know more, they wanted more
information. A lot of them who were -- you know, they
are reasonable people. They understand things happen.
But they said, you know, I am without power, I have got
Southwest Gas, they aren't telling me anything, they are
not telling me anything, I can't get any information.

And, you know, then one of them sent me an
e-mail from Supervisor Call, Pat Call. He was very
helpful in Sierra Vista. And he was somehow trying to
get information at least sent out to all the e-mails he
had. And I noticed in particular he was telling them
about the PURPA act and saying this is good, that means
our elderly and hospitals will be taken care of more
quickly.

But, in fact, we do know, as I have talked to
you, and you said it really didn't work that well
because your system needs to be updated, there were
elderly people that you don't have on your list as being
elderly so they weren't there. And there just were a
number of e-mails and calls from people that show it
simply didn't work like it was supposed to.

I know we have talked about it and you said you want to update it. And I understand there are some difficulties in doing that. But I would like to know how you would go about updating your list and then utilizing that list.

MR. CLARK: Okay. Thank you, Mr. Chairman and Commissioner Burns. We have learned a lot about the PURPA process as we have gone through this outage. May I let you know what takes place currently as far as PURPA customers.

When a customer signs up for service at Southwest Gas, either that primary applicant or a co-applicant, we ask them for their birth date. That's a voluntarily asked question. If they provide us that birth date, then it is entered into the system. The system then queries both of the primary applicant and the co-applicant on a monthly basis. And if either one of those reach the age of 62, which is the elderly classification for the PURPA act, then it is coded automatically in our system as a PURPA customer.

One of the things that we ran into in the outage is many customers of record had elderly parents living with them. For example, they aren't the customer of record in our billing system and they -- we have no way...
of tracking and knowing that that situation was in the home.

When a customer calls in to request service, our customer reps are trained to ask if there is any elderly, handicapped, disabled individual in your home; if so, we have an application that we will forward to you that you can fill out and return which will then properly code this information into our system.

We recognize that there are other things that can be done. We had over 6,000 customers in this outage area identified as PURPA customers. And we gave them priority in restoring their service and getting their gas on as quickly as possible.

COM. BURNS: I appreciate that. And I understand there are hurdles even in getting a list. If someone were to ask, my power company were to ask me my age, I would probably say I don't need to fill that in. But if the people know the reason you are asking, you know, it is, again, it is just about communication, this is because, in an outage, we want to be able to take care of you, then it makes sense and then they might provide the information.

But there were other things going on, too. You know, when you read the e-mails, space heaters sold out very quickly. There were contacts with SSVEC, their
electric provider, to make sure were they going to be
able to -- obviously there was going to be a bigger draw
on electricity. And they felt comfortable there. But
all those things going on there teach us all about the
things that need to be addressed, just like space
heaters being sold out.
I just wanted to jump and ask -- oh, one other
question before I move to that one. I probably am out
of my five minutes. One of the things I heard, the
e-mail was that Southwest Gas employees should have been
working around the clock, not just daylight hours. Can
you respond to that?

MR. CLARK: Yes. Mr. Chairman and Commissioner
Burns, we have found historically that we work as many
hours as our customers are comfortable for us to knock
on their door. In the field historically we work from
7:00 a.m. to 11:00 p.m. at night. We have found that
after 11:00 that customers are leery of hearing that
knock on their door and responding.
So in order to facilitate that plus give our
people a little bit of rest, we would work from 7:00
a.m. to 11:00 p.m. at night and we continued that
process clear through the weekend. Our call center was
opened extended hours on Friday. We had a minor glitch
with our e-mail system and we kept our call center folks
in the office answering the phones until, again, 11:00 p.m. when those calls diminished and we felt we could allow them to go home.

Working around the clock is certainly something that can be pursued. But we have found, from our perspective, that when you knock on somebody's door after 11:00 p.m., they just are unwilling to respond. And then our efficiency drops off dramatically after that time period.

COM. BURNS: I think my time is up.

CHMN. PIERCE: Thank you.

Commissioner Kennedy.

COM. KENNEDY: Thank you, Mr. Chairman.

First let me say I think I have learned more about line packs and decatherms, more than I wanted to. And let me thank all the stakeholders and all parties for coming today, and especially El Paso Natural Gas and their response to my letter. I thought it was very informative. It was well -- it was thorough. So I believe my questions were answered.

When outages like this occur, human health and safety is really put at risk and significant financial losses to businesses. And I am concerned about that.

While emotions run high, jumping to conclusions before the facts are known is not, was not helpful. I
believe being here today we are gathering the facts. We can't solve the problem until we identify the problem.

I am concerned that someone in Texas ordered a rolling power outage that affected Arizona. I am deeply concerned about that. Without communicating that power outage to all affected stakeholders, Arizona truly suffered.

I don't want the past to occur in the future. What we do here in Arizona might be able to assist other providers around the United States so they don't fall into the same shoes as we did here today.

Again, I don't have any questions. But I just really thank you, Mr. Chairman. I think Commissioner Burns kind of hit it on the head. We are here today sitting in Phoenix hearing from everyone today, but those affected by this outage are in southern Arizona. And most of them are working people who couldn't travel here today. And I am hoping that you and maybe Staff can put together some time, I think we owe it to the people in southern Arizona, to go down and hear them out.

CHMN. PIERCE: Okay. Thank you.

And we are going to come back in the same order after lunch. But let me just say we have a rate case that Southwest Gas has filed. And I think in the coming
weeks we can actually, in conjunction with that, where
we would normally go out and take public comment on
that, we can actually, so to speak, kill two birds with
one stone and be able to go out and take public comment
on any issue the public wants to talk about. And I
suspect Tucson, Sierra Vista and Green Valley, different
areas that maybe get impacted by the company, as well as
other areas of Arizona, especially if there is going to
be discussion down the road and they see it from this,
that there is discussion about storage and to get public
input about those types of things.

But I thought for us, and, you know, frankly
those meetings, we need to have, with the exception of
perhaps Green Valley, but even in that area it is
handiest for the public for us to do evening meetings.
That is not handy for a lot of the folks that are here
or Staff or others, that we would need this type of
meeting from Commissioners. And I think this meeting
will give the public a lot more information, detailed
information that is finally facts, not rumors and other
things that they are hearing, but facts so they can
digest those and come to those public meetings,
certainly let us know how that impacted them but, at the
same time, let them be able to be part of what they
think the -- what in their mind solutions would be, too,
and what they want to see the companies, the various
companies do in the future.

We are going to break for just a minute.

COM. KENNEDY: If you don't mind, Mr. Chairman,
could I go over?

CHMN. PIERCE: Yes, sure. I'm sorry.

COM. KENNEDY: That's okay.

I just want to say I don't think there is any
secret here that I am a huge supporter of natural gas
storage. We have been talking about it, I think now,
for three, four years. But I think it would increase
the reliability of supply to Arizona natural gas
customers. And I think Mr. Crockett took the words
right out of my mouth: If not today, then when. And I
think Commission Staff and stakeholders have been
talking about it since, I believe, 2003. It is time we
do something about it.

CHMN. PIERCE: Something to chew about it at
lunch.

Commissioner Newman, we need to wrap up here.

COM. NEWMAN: Yes. To the point that

Commissioner Burns and Commissioner Kennedy made, and I
was going to make on my next point if I had another
minute to do it, it is now -- I will make it a majority
of the Commission right now. I am truly asking the
Commissioner, all the Commissioners and the Chairman to schedule meetings in Sierra, Cochise County and Pima County. I think we need to hear from the customers. We have letters; that's not enough. I think that the executives need to meet with the customers.

I mentioned it to some of the Southwest Gas employees that I was going to make this request. And it will give us something to think about over lunch. But as I know that folks would like to talk to us about this, there is also that issue of compensation hanging out. I know there is force majeure clauses in El Paso pipeline contracts. But I think they also want that question answered. And they would like us to look them in the eye, and executives, look them in the eye on that question.

So with that, I make it official. I ask for hearings down in Cochise County, either in Buena Vista High School in Sierra Vista or Cochise County Board of Supervisors, which has a bigger room than this. And I am sure the Pima County board will help us find a suitable place to have a meeting in Pima County.

And thank you so much for your time.

CHMN. PIERCE: Sure. And we have had meetings in those areas that will house a lot of people. And I know in Tucson we would want to do it up in the
northwest, not at our Commission room. I don't think
that room will be big enough either. So we will do that
where we can accommodate the public and do it in an
hour -- at an hour that is convenient for the public.
So that will be our plan. And we will, we will schedule
that.

And that, that will be like your traditional
town hall type of meeting is how we will handle it. It
really will be the public speaking, us listening, maybe
asking some questions. The information that the company
would provide should already, in my view, be printed,
published so that the public has a chance to read that
and have it available at the meeting so that they have
that, because, otherwise, we just go back, we start
repeating things that, if they had it in their hand,
they -- frankly, if I am speaking and if there is
something I could have read and known so I could have
honored in my question, as a member of the public, I would
want to be able to hone in my comments and questions to
the things that are still unknown to me.

So we will be back at, let's be back at 12:35 --
or 1:35. Yeah, you got three minutes. 1:35.

(A recess ensued from 12:32 p.m. to 1:39 p.m.)

CHMN. PIERCE: Okay. We are back in order. We
have got a quorum.
Our order of speaking is we are going to go back around with Commissioner Newman. He is not in the room yet.

Commissioner Stump, do you have anything?

COM. STUMP: Sure.

CHMN. PIERCE: Okay. Let you begin, and you are on the clock for five, approximately.

COM. STUMP: Well, I will not --

CHMN. PIERCE: I just wanted to let you know how Congress does it.

COM. STUMP: Wow. Thank you, Senator. Anyway, I mean -- oh, I meant Senator Kennedy, but she is not here.

It was mentioned there could be integration with the electric sector and that may have been a factor. And I would be curious to know what sort of integration, as you see it, might need to occur since I have heard repeatedly that has been an issue.

I guess, Mr. Clark, I would throw that out to you, or Mr. Moody --

MR. CLARK: Mr. Moody.

COM. STUMP: -- or most anyone.

MR. MOODY: He is going to defer to me, which might not be a good move.

Communication, I think Commissioner Kennedy put
it best, El Paso made a good presentation on this.
Transwestern will say it, as the electric and power
industries get more integrated, especially here in the
west where a lot of our generation is natural gas fired,
the traditional "one doesn't worry about the other" is
going by the wayside. And there is a national movement
through AGA, NAESB to change those rules, look at the
scheduling rules. That's one thing, scheduling gas.

And the second and bigger role is for everybody
to understand how integrated these systems are. This
really does demonstrate that a power plant in Texas
might matter in Arizona or California. California had
curtailments during this, too. So it is a big thing.
And we always find out about it when it breaks.

I don't feel qualified to sit here and tell you
how to make our way through that except to say there is
an industry effort with the constituent trade
associations as well as being members of the NAESB crew.
We have representation there and we do our best to
proscribe what we think is a good idea. But there are a
lot of big heads thinking about this now.

And I also defer to El Paso because they have a
different role in this.

COM. STUMP: Sure.

MR. MOODY: And it gets back into the power in
the gathering areas and the gas plants, which they don't have control over. That's another constituent that I assume is going to work and they have to deal with on a daily basis.

COM. STUMP: Thanks.

Were you interested in addressing that, Mr. Cleary?

MR. CLEARY: Yes, Commissioner.

COM. STUMP: Thanks.

MR. CLEARY: I think one item we would like to pursue is making sure that essential gas facilities, whether it is pipeline compressor stations or processing plants are on, to the extent we can, the critical infrastructure list that the electric utilities or the system operators have. And I don't think that, in fact I know, that is not the case today. But we are going to explore that and see if that can be done.

COM. STUMP: Great. Thanks.

CHMN. PIERCE: We will bounce back to Commissioner Newman.

COM. NEWMAN: Thank you, Mr. Chairman.

One issue I would like to raise that I would like to get everyone's take on this, is compensation for potential damages. Just, I want to hear what all the parties have to say about it.
There is going to be a rate case coming up on Southwest Gas. This might be included in that discussion. But for purposes of today I just wanted to hear the parties' initial, initial positions on some of the consumer requests that we have had for compensation, missed days of work, things like that. I know it might add up to a lot of money, but I want to initially hear from the folks.

I have no predisposition on this. I am sitting as a judge when I ask this question. Who wants to --

MR. BROWN: Chairman Pierce, Commissioner Newman, Justin Brown on behalf of Southwest Gas. I will address it for Southwest Gas, your question.

What the company has been doing as we receive claims, we have been reviewing those claims from consistency with our tariff as well as the Commission regulations, you know, given the weather event and the force majeure associated with that. As we review those claims, if they are weather event force majeure related, we would not be paying those claims. If there are incidents where, as we review these, where we believe maybe it is something that Southwest Gas did outside of that weather related event, the company would then, you know, review that in terms of whether compensation would be justified or not.
COM. NEWMAN: And for purposes of the record, we are making a record now, would you -- not everyone on the Commission is an attorney; I am the only one. What does force majeure mean?

MR. BROWN: Well, a force majeure a lot of times is defined by contract. So, you know, as it appears in the regulations and, you know, it shows the example of force majeure, it is essentially when events occur similar to this weather related event that's outside the control of the parties will trigger a force majeure to allow the parties to be excused from their obligations to perform.

COM. NEWMAN: It, not to take God's name in vain, but, as a Jewish person, but I also heard it colloquially called act of God.

MR. BROWN: It is commonly referred to that, absolutely.

COM. NEWMAN: Okay. So how many folks are you in contact with approximately in the service area that have such claims? And if you don't have that number, I understand. That might be something that the Commission wants, I want. That is something that the Commission, this Commissioner would like to see.

MR. BROWN: Sure. The claims, the last check that I, the update that I have received earlier in the
week was I think we had received around low 40s. 44 is a number that I remember in terms of claims that we have been submitted. Obviously they come in from different sources. So as those are gathered and collected, you know, there may be some that the company has received, they just hadn't made it to the person that is keeping track of those claims. But according to that person, I think we were at 44.

COM. NEWMAN: And of that number, just approximately how many are businesses versus residences?

MR. BROWN: I don't have a tally in terms of, you know, residential customers versus commercial class customers.

COM. NEWMAN: For example, down in the Sierra Vista area I am almost sure there were some businesses that were affected. Pizza folks and people who might just write this off as a bad business expense, they could technically do that, I think, if you are a commercial entity. But do you have any idea about the magnitude of that?

MR. BROWN: I really don't. I don't have any insight into those circumstances.

COM. NEWMAN: Okay. And I think in the Tucson service area there are probably businesses as well along Skyline and those areas that might have been affected.
I am not sure. I am not sure of the extent of the boundaries in the Foothills where the outage occurred.

And I understand, by the way, that it could have been a lot worse. It could have been 150,000 folks in the Houghton line area. But that, that would be of-- that's a concern to me. And regardless of act of God conditions, that is something that we are here to sort of moderate and mediate, if you would.

MR. BROWN: Sure.

COM. NEWMAN: So the position today is, if it is included under act of God or force majeure, you have a legal position that you wouldn't pay for it. However, you might make further, you might make compensation in the future, and complete my sentence, if what.

MR. BROWN: Well, as I indicated, as we are reviewing, we didn't want to cast a broad net and just say no. That's why, as we receive them, we review them. As you correctly stated, if it falls under that weather related force majeure event, you know, the company does not plan to pay those claims. However, if as we review them, the facts and circumstances associated with that particular customer, we learn something that we, Southwest Gas, did that would have contributed or caused, you know, certain damages, we are going to look at those, because we want to make that situation right.
COM. NEWMAN: Okay. Thank you.

And opening it up to anyone, I am requesting a response from El Paso.

MR. CLEARY: Sure. Commissioner, I think we are sympathetic to the impacts upon Arizona residential customers of this cold weather event. But from our perspective, compensation is not our responsibility under the facts as we know them.

And particularly critical to this analysis is this was not a pipeline outage. This event was a failure of gas supply coming into the pipeline. Indeed we delivered throughout February 1st, 2nd, 3rd and 4th every single decatherm that our customers delivered into our system. We delivered it to them. We delivered on February 2nd and 3rd 17 to 20 more than they put in, utilizing our storage, which was running flawlessly, and our line pack. And I think we have done what we were obligated to do.

COM. NEWMAN: Are there any, this is for El Paso, are there any FERC implications of this in terms of decisions? I mean the 50 power points going down in Texas is more than just a blip. That is a huge loss of power for a very important section of the country that affected ours. I accept the analysis of what -- and my responses I have gotten from both companies. But is
there any FERC jurisdiction over this?

MR. CLEARY: Commissioner, I understand that there is a FERC investigation that is going on looking into what happened in Texas and the interrelationship between power losses and impacts on other activities in the gas sector. And that's ongoing.

CHMN. PIERCE: Okay.

COM. NEWMAN: And is there, is it -- I just -- is there any -- I was asked by a television reporter after, after this morning's meetings, you know, whether or not the Commission feels, and I am only one member of the Commission, feels that there should be any fines associated with this. And I said, you know, it is too early to say. And I know about the force majeure, and so we will look at that very closely with our legal Staff and pipeline Staff.

But is there a chance that FERC would go on -- would they leave it to the states to deal with that or would they sort of, could they pinpoint some -- if they did pinpoint a problem closing so many of the stations, is there a possibility of deferral back to the states given whatever it is that they will come up with in the final report for a potential of fines?

I realize from a shareholder standpoint you don't want fines and you are holding fast to your force
majeure defense. But just given your experience and
your wealth of education, is there?

MR. CLEARY: I guess I am not sure what the FERC
or NERC, the electricity reliability council, may do in
this instance. And I wouldn't want to guess.

CHMN. PIERCE: Okay. Commissioner Stump, we
started with you, and so we are going to go to me for a
few questions.

To those who, and this is I guess to all
parties, do you believe that a summer incident, where
there would be an interruption of natural gas with the
heat we have in Arizona, do you think a summer incident
would be a greater impact to human health than a winter
incident? If we lose natural gas powered peaking plants
in the heat of the summer, would that be a bigger, do
you believe that would be a more detrimental thing to
human health in Arizona, to Arizonans?

MR. MOODY: I think a general answer I would
make is it is never good to have a customer out. We are
all shooting for reliability. And if it is, you know,
as Phoenix can be in August -- I am trying to imagine
being out of my air conditioning -- it strikes me that
the big difference is that the service re-establishment
requirement is totally different.

Electric doesn't have to visit your home. So
speaking, speaking way out of my pay grade here, when your lights blink out and they come back on, the voodoo of electricity gets my power back and I don't have to deal with anybody from the company. A gas company, we have a different burden.

CHMN. PIERCE: I think there would be a much more, there would be an emergency plan that was different than with natural gas most certainly. But I think it would be a problem, if any of us can imagine, because it would -- invariably those things happen when it is extremely hot, it seems like.

And I listen to this, but, and I want to talk to just the storage folks, because I had the discussion earlier. It was said that everyone believes it would have been, if we had storage, it would have been limited. But in this situation, I think we know there is enough storage, there is enough capacity if we build it to, I think, more than compensate for what occurred in this incident, and probably for one that is twice as long an incident or more, with the proper amount of storage. And what is being proposed down in Eloy right now, I believe, could have handled this much more. And I want you to comment on that.

MR. BOWE: For Arizona Natural Gas, Chairman, we would agree that had the Eloy facility been fully
operational with the capability we have designed into the facility, we could have provided an awful lot of precious support in the heart of the market. Whether it would have eliminated all potential problems I am not qualified to say. I speak out of turn all the time, but I am not a hydraulic, pipeline hydraulic engineer, but it would have provided a substantial quantity of gas, well in excess of the shortfall that Mr. Cleary mentioned he experienced on the basically input side of his system right here in the market area.

Effectively you would have been able to make up for the shortfall. And the facility would have been able to carry on in that fashion, assuming that it was built to its design capacity and was essentially full at the time, for several days. So you could have had a half a billion cubic feet a day of gas being introduced into the market for several days to make up for shortfalls in the availability of gas coming into the El Paso and Transwestern systems.

I guess perhaps El Paso had a little bit more trouble in Permian than Transwestern did. But in both cases there was less gas coming in than was being pulled out. That's what market area storage allows you to compensate for. So had we been here, I think we would have had a different outcome.
CHMN. PIERCE: Well, and I think it would have been a dramatic difference. And I think it would have beyond -- and I think natural gas storage will take us well beyond. And we can expand natural gas storage in that area, can we not, to how much more than the initial phase that you are talking about?

MR. BOWE: It is a matter of money, of course. But fortunately for gas storage, the economics become more favorable. As you increase the amount of capacity, the cost of providing the service drops. The upfront costs are for the pipeline infrastructure, for the leaching of the facilities, that sort of thing. And what is --

CHMN. PIERCE: The economy of scale.

MR. BOWE: That's right.

MR. PASTOR: And there is also the fact that once you have that infrastructure for evaporation ponds, they are set for a certain design life, an eight-year leaching period followed by a ten-year evaporation period. You can continue to build subsequent caverns on top of that and use that same infrastructure there at the facility.

CHMN. PIERCE: Okay.

MR. BOWE: In the initial design I think, if I am not mistaken -- I will look to the back of the
room -- three bcf of capacity, four, and we could go beyond that, although it takes time. The reality is that the leaching process isn't instantaneous. But you could bring storage into the market and then allow the storage to grow as the market's need for the additional insurance grows over time.

And it will because the electric system, as was indicated earlier, is extraordinarily dependent upon the natural gas system. And that will become increasingly true as we continue to try and integrate renewables such as wind and solar.

The way that is done at the bulk power level is through gas fired generation being dispatched on and off, off line. The reality is that in this part of the United States, natural gas fired generation is going to become more and more critical over time as renewable portfolio standards, in the case of California, kick in and as other initiatives are pursued to reduce the use of coal fired generation.

Every time we look at it, we conclude that the amount of gas fired generation that we are going to be relying upon is going to increase. That is one of the major drivers behind the development of gas storage in the United States over the last decade, is to be able to load follow the variations in demand that we see with
gas fired power generation. And we only see that increasing over time.

As to your question as to whether there would have been a greater public health impact from the loss of gas during the summer, I can't speak in terms of public health but I can speak in terms of the amount of time it could take to restore the electric grid if there were to be a loss of enough gas so that the grid were to collapse. That has happened elsewhere in the United States, I think it was in August of 2004 in the New York area, not because of natural gas per se but because of some other transmission related problems. And it took several days to get power back on in New York City. That would be a difficult thing to cope with with 120 degree heat here in Arizona.

CHMN. PIERCE: Thank you.

And my time is up and we will go to Commissioner Burns, if you have questions. By the way, you don't have to have questions. But I am going to go in order. And so you have an opportunity.

COM. BURNS: Lucky for everybody I left my notes upstairs. I will be very brief. I will just stay on natural gas storage for now.

I think it is really great. It sounds like -- I did not know where my fellow, all my fellow
Commissioners were on this issue, but it looks like you
certainly have got a Commission here who is all very
favorable towards natural gas storage and well aware of
the El Paso project that didn't make it over by Luke Air
Force Base.

I was previously involved in that myself. And
in the letter that I sent out, you know, I was
reflecting on Senator Spitzer, or Commissioner Spitzer's
comments back in 2003, 2004. And there were
Commissioners then who were very supportive and wanted
to see us go that direction. And, you know, my, my view
of it has always been with regard to gas price
volatility. And those were the comments that
Mr. Spitzer had made. But now we see obviously another,
at least I have been enlightened, another big reason to
have it as well. So hopefully we can make some progress
on it. But I know the devil is always in the details.

Just two other things.

One is I just wanted to make a comment. As
Southwest Gas looks at how you can better communicate, I
know you said one of the first things you did was you
reached out to your customers. And, yet, there were
some specific customers, because there are a lot of
customers, who didn't feel reached out to at all. And I
know you talked about the reverse 911 that you have in
the Tucson area that you didn't have the availability
for in Sierra Vista. You may have other clients or
customers that live in areas without the reverse 911.
So we will be looking forward to hearing how you would
remedy that.

And then, secondly, I don't know if the Chairman
lastly intends to go to Staff at any conclusion, but I
would be very interested in knowing if they have any
comments that they would like to share as a result of
anything they have been hearing here.

CHMN. PIERCE: And, well, at any time Staff can
pipe in, but I think, Commissioner Burns, it might be a
good time, then, let them respond, because that will
wipe out your time.

COM. BURNS: You would rather hear from them
than me.

CHMN. PIERCE: Mr. Olea.

MR. OLEA: And yes, Mr. Chairman, and
Commissioners, this is Steve Olea for Staff. And I
don't have anything specific to add to the discussion.

I know that I sat in on all the meetings with
you. But one of the things that did catch my attention
in the meeting with El Paso was their storage that they
have and the fact that they had used all they could as
far as the capacity on the output of that storage. And
it was about 250. And I am not good with the, with
the -- okay, I think it was 250 million decatherms,
something like that.

MR. CLEARY: That's correct.

MR. OLEA: As far as the units. And that's all
they could get out of it. But I did ask the question at
one of the meetings, was, well, so did you use all the
storage you had. And they said no, we had gas left in
there. And so my question to the parties is would then
part of the storage problem be satisfied if you could
get 500 million decatherms a day out of there instead of
250. So, in other words, if you had two pipes instead
of one pipe -- I don't know if it is one pipe or 20
pipes -- but if you double the size of the output from
that, would that have helped, or if you tripled the size
of the output, would that have helped.

So, you know, that's, you know, a thought that I
had. Because we keep talking about having the storage
directly in Arizona, which I know would be better. And
I know from the Staff point of view that we have talked
about, you know, the Luke site as being one of the best
because it is right in the center of, you know, what is
called power plant alley and all that. But even if you
didn't get storage in Arizona for whatever reasons that
was, would increasing the output of the storage that
already exists in New Mexico, would that have helped the situation in Arizona?

CHMN. PIERCE: At the Washington facility?

MR. OLEA: Yes.

CHMN. PIERCE: Anyone, someone want to tackle that?

MR. CLEARY: Briefly, Mr. Chairman, if I may respond to Mr. Olea.

CHMN. PIERCE: Go ahead and pull that mike over. It moves.

MR. CLEARY: Thank you. The issue at Washington Ranch is not pipeline takeaway capacity. It is facilities that we need at the storage field itself to enable us to pull gas out quicker. And really that was what we essentially proposed in our 2008 expansion.

We were not going to increase the inventory capacity. That would stay at 44 bcf working storage capacity. But we were going to increase by 100,000 decatherms a day our ability to pull it out, withdraw capacity from 250 to 350. So we could do that. Cost some money, but it is probably less costly than market area storage. But you just have to weigh the tradeoffs between do you want the storage in the market area or in the supply area.

MR. BOWE: Mr. Chairman, may I respond for
Arizona Natural Gas Storage?

No question that adding additional deliverability from the Washington Ranch field would have helped because the problem was not as much gas coming into the system as the market was taking from the system. There would be a limit to how much you could get out of the Washington Ranch facility that would provide the kind of pressure push you would like to have in a situation which you have seen pressures decline. That's why market area storage would provide a real benefit.

One other reality is that salt cavern storage has the virtue of very, very high deliverability relative to the amount of capacity that is developed, so that effectively you are pulling gas out of what amounts to a very large hole in the ground. You have to manage a reservoir, a reservoir like the Washington Ranch facility, carefully for various reasons. And you have to limit the deliverability you achieve in order to avoid doing long-term damage to the facility.

A market area salt cavern storage facility can essentially be opened up full throttle and provide a whole lot of deliverability almost instantly. So that is a difference. No question that having additional deliverability as Washington Ranch would have been
helpful. Having the amount of deliverability you could
get out of a gas storage facility right at the heart of
the market would have been more helpful still.

CHMN. PIERCE: We just have to weigh wheeling.

Commissioner Burns has a follow-up.

COM. BURNS: Yes, one remark, yes. FERC is
investigating this, and I am very much looking forward
to seeing what they find because I am sure they will be
looking into Texas like we can't do from here.

And just, and a very easy question for you, who
all is a part of the Arizona natural gas storage
coalition?

CHMN. PIERCE: You can raise your hands if you
are. Then we would know.

MR. SHELLEY: We are.

CHMN. PIERCE: Southwest Gas.

COM. BURNS: Southwest Gas.

MS. BRANDT: Salt River Project.

CHMN. PIERCE: SRP, APS.

MR. MOODY: UNS.

CHMN. PIERCE: UNS, Southwest Gas. Anybody
else?

COM. BURNS: That's four groups, Southwest Gas,
SRP, UNS, and AEPCO?

MR. GRAY: And AEPCO.
CHMN. PIERCE: I would think so, TEP and AEPCO, because you would think your power, it is a natural gas, has a natural gas generation, it is going to be a part of it, I would hope.

Commissioner Kennedy.

COM. KENNEDY: Thank you, Mr. Chairman.

Mr. Olea actually asked my question.

CHMN. PIERCE: Well, thank you, Mr. Olea.

All right. We will go back to Commissioner Newman.

COM. NEWMAN: Thank you, Mr. Chairman. A couple questions. I am going to get off storage right now, although this is a long discussion.

I actually believe after having this discussion and talking to some of the stakeholders that we have enough information to know that storage is an important point. And I would love to co-sponsor with any of the Commissioners a workshop with the stakeholders on workshops, on storage.

In fact, I don't even believe all the players are necessarily sitting at this table. In fact I know they are not. There are some other potential suppliers in competition to produce storage in Arizona who are not represented here. They are in the audience but they are not ready to present today.
So I would just like to say that I think, Mr. Chairman and my colleagues, I think that this does merit a workshop with stakeholders, that we work over a period of time on this issue.

My one -- and I have a question of storage, a question about communications. You had noted that Pima County had a pretty robust 911 system. Of course, you know, the taxpayers have to pay for that. They were working on it for a long time. A lot of grants that came out of Homeland Security after 9/11 helped the situation. But in a place like Cochise County, I happen to know that we have one Homeland Security director that we appointed. And there was one gentleman who worked for many years. We just had one gentleman, sort of a retired gentleman, who just completed 911 mapping for Cochise County. And so Pima County, you were able to use the reverse 911. Cochise County, you were not able to use 911. And I think this would be of interest to the folks in Sierra Vista.

Can you amplify on this and what we can do to help Cochise County perhaps and yourself improve emergency communications?

MR. CLARK: I would be glad to. Chairman Pierce and Commissioner Newman, the reverse 911 system that we utilized within Pima County was a one time opportunity
for us in that area to put out a message to customers somewhat related to the outage area. We had lost 14,600 customers, and the calls went out based on the boundaries that had to be defined to about 18,000 customers. So some of them received a message that actually were not out of natural gas service.

We looked at --

COM. NEWMAN: That might have been confusing to some folks.

MR. CLARK: It very well could have been.

We also looked at in Cochise County utilizing a similar system that they had. However, their system would only allow for a 15 second message. And we tried to craft as concise of a message as we could. It was about 30 plus seconds that went out over the Pima County system. And we felt with the shorter time frame it would have been more frustrating to customers to get either a partial message or we would have had to have abbreviated so much that it wouldn't have been meaningful to them, so we opted not to use it.

Now, the predictive dialing system that we are looking into as a company, if that's a viable resource and the company decides to utilize that system in our call centers, would not be an emergency type system. We could utilize it for many purposes hopefully throughout...
our entire service territory as it was required. And
the message length would not be restricted. And,
therefore, we could give updates over that system to
customers. We could obviously give primary information
to them. All of those things would more than likely be
available through this new technology we are looking
into.

COM. NEWMAN: Maso menos again, projection of
the cost of the predictive dialing system, and do other
tentities, other distribution entities have such
predictive dialing?

MR. CLARK: Commissioner Newman, at this point
in time I don't have an answer to your question. So I
don't know the costs of such a system or whatever of the
LDCs, either in Arizona or outside of the state, have
this capability.

COM. NEWMAN: Will you be able to provide that
to the Commissioners post haste?

MR. CLARK: We can look into that, yes.

COM. NEWMAN: One other question, Chairman, and
this involves cost of storage. We have one of the
companies at the table. And I know that your plan looks
to store, have -- store aboveground, which might
mitigate some potential water table problems in your
design, and that there is other designs out there, which
is one of the reasons why I want to have a, you know, workshop, so we understand the different designs as we go forward, but mas o menos again, projection of the cost, if you will, of your plan, which I believe mitigates some of the potential environmental water issues that were raised in the last couple of years.

CHMN. PIERCE: Could you give a cost quickly, an approximation what that would be?

MR. BOWE: Yes. I don't mean to be flippant. They always seem to cost $350 million.

CHMN. PIERCE: That's a number we hear continually, between 3- and 350.

COM. NEWMAN: Yes, but I wanted it on the record.

MR. BOWE: That is a mas o menos number.

COM. NEWMAN: I understand. This is, it might be violation --

MR. BOWE: On a per unit basis it could be menos; if we could get a little bit mas, maybe --

COM. NEWMAN: Who would pay?

MR. BOWE: We would expect the customers who make long-term commitments to take service from the project to pay. There would be a reservation charge that would reserve the right to a particular quantity of capacity. There would be a variable charge that would
be assessed on injections and withdrawals. And the
customers would pay the costs of the project.

The precise nature of the rate arrangement we
have been in discussion with customers about are the
subject of a confidentiality agreement, which I know my
client would be more than happy to waive if that
requires everyone’s agreement. My client proposes just
to go by the book with the project so that everyone is
aware what the actual costs of developing and
commissioning the project are.

But the customers would pay. There needs to be
a commitment of enough of the customers for enough
capacity to make the economics of the project make sense
for everyone. There may be some amount of additional
capacity or deliverability that could be available to
the market on what would amount to a spot basis. And we
would take that possibility in account and allow some of
the benefit of that to flow back to the subscribers who
have made the project possible.

COM. NEWMAN: And then, of course, the
shareholders wouldn't necessarily be, wouldn't foot that
cost. You are talking about ratepayers down the line,
aren't you?

MR. BOWE: For the commitments for capacity,
yes, we would expect the customers to make the
commitments and make the pledge economically viable.

Now, of course, the project's developers, the shareholders take the risk of completing the project and of bringing it in at a cost that's commensurate with whatever the arrangements are with the customers. And, of course, there is risks all along the way.

There is operating risk, which, of course, you have to mitigate by being a prudent operator. But there would -- this is not the sort of project you would characterize as a simple matter that generates an annuity. There is a certain amount of art to bringing one of these projects on. My clients have done it before in a number of cases and has significant experience in getting it done. But it is not a risk free proposition.

CHMN. PIERCE: We are going to move.

Commissioner Stump.

COM. STUMP: Thanks, Mr. Chairman, a couple of brief questions.

Sir, I don't recall if you mentioned this already, but did you speculate as to how many jobs might be brought into the Eloy area should storage be implemented there or fully implemented?

MR. PASTOR: We have looked at that as far as work force development. I don't have the numbers off
the top, or at my fingertips here. But at peak force we are probably talking about 400 construction staff or more.

COM. STUMP: And my understanding is that Eloy is rather ideal topographically and otherwise. And, of course, Luke had been in the mix at one point. Has Luke weighed in on that recently or has that not really been --

MR. BOWE: Luke is not part of our plans. I think there are legal impediments that would make developing Luke essentially impossible.

COM. STUMP: Yeah. Thanks.

CHMN. PIERCE: Could we, and I think there could be large -- do we want to correct the number of jobs? Because I have heard numbers higher than that as well. We will need it on the record, if someone wants to do that.

MR. BOWE: We would be happy to provide that one.

CHMN. PIERCE: Well, Mr. Crockett was in a meeting and I know we could have that before I am done with this next question, and then we can make sure we are correct.

I want to go to price stability, what happens to price stability, and Southwest Gas can answer this,
others could, by having natural gas storage, what that
does when all of a sudden we see we are short, or maybe,
because it is a guessing game each day, and we buy here
and at the end of the day we have got -- we need to sell
some. And when we need to sell some, bad things happen
to price. It is amazing, but I just bought it, I just
drove it off the lot and for some reason that natural
gas is not worth as much. So what does storage do to
price stability?

MR. MOODY: Well, certainly for Southwest Gas,
if we had storage, the top of the list is daily
balancing. But one of the side notes of daily balancing
on the system is that, for example, if you can take away
the customer outage portion of this and just assume
everybody got their service, we paid as much as 10 or
$11 a decatherm for gas that we purchased late cycle,
that if we had storage we would have --

CHMN. PIERCE: When you say late cycle, in a
day.

MR. MOODY: Yes, I better explain myself. Thank
you. I am going to be more clear.

Late cycle means the cheapest gas I am going to
buy the day before the day I burn it. And then as time
moves on, I have different kinds of gas deals that I
have to purchase for my customers. And we find out
1 demand changes and then we want to satisfy that. And
2 the price goes up because it is under high demand and it
3 is late and it is typically coming into the system later
4 on. So certainly that variation of price stability, I
5 would then have a choice of using storage gas or
6 purchasing that day. That's the simple version. Also
7 you are going to have an inventory value. You have a
8 value of gas in the ground. And so that gets to be a
9 fairly complex mix.
10
11 The second place is that, with storage, we can
12 line up gas deals that are more ratable. They don't
13 have peaking capabilities added to them. And so on a
14 day when we don't need to burn the gas, we might run it
15 in storage. And that means we can levelize our gas
16 purchases.
17
18 And I don't want to lead you to believe that in
19 the modern gas markets that can rationalize storage,
20 because the gas prices the day before the event were $4,
21 the day of the event may have been as high as 10, the
22 day after they were 4. So we don't have these prolonged
23 periods of time of volatility maybe we were having in
24 2007 or 2006 where gas might move 2 or $3 over a period
25 of a couple months.
26
27 CHMN. PIERCE: But it is certainly a side
28 benefit.
MR. MOODY: Oh, absolutely. It would be considered in each study we would bring to the Commission.

CHMN. PIERCE: I am finished. Do we have an employment -- I am finished, so...

MR. PASTOR: Yeah. I have updated numbers. For the currently scoped project, the work force would average 350 over a year and a half period with peak levels rising up to about 500.

CHMN. PIERCE: Okay.

MR. PASTOR: And there would be 20 permanent positions at the facility.

CHMN. PIERCE: All right. Now, that would be over a period of a couple years that happening?

MR. PASTOR: That's right. The construction period would be about a year and a half to two years for the primary infrastructure construction.

CHMN. PIERCE: Very good. Thank you.

Commissioner Burns.

COM. BURNS: Well, I think he answered the only other question I had on that. And that was the long-term employees, did you say 20?

MR. PASTOR: That's correct.

COM. BURNS: And what kind of jobs are those?

MR. PASTOR: Those are facility operators and
maintenance staff at the site as well as some
environmental specialists that would do some monitoring
activities as well.

MR. BOWE: Generally skilled jobs.

CHMN. PIERCE: Thank you.

Commissioner Kennedy.

COM. KENNEDY: Mr. Chairman.

The project in Eloy, do you have the support of
the Pinal County supervisors? Are they on board?

Anybody?

CHMN. PIERCE: I guess the question would be
have they passed a special use permit, if anybody knows.

COM. KENNEDY: I just wanted to know where they
are. Have you talked to them?

MR. PASTOR: Yes, we have been in to talk to the
City of Eloy specifically about the project. And they
are in support.

COM. KENNEDY: How about the Pinal County Board
of Supervisors?

MR. BOWE: I don't know that we have. We have
met with them.

CHMN. PIERCE: Can we get -- you know, it would
be great to have someone, if you want to, that has that
information to come up and answer Commissioner Kennedy's
question one on one because she is probably going to

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have some more.

MR. BOWE: My apologies. I am the federal permitting guy.

CHMN. PIERCE: But, you know, we have met with the company as well and we know everybody involved. So we would love to have -- go ahead and identify yourself and then --

MS. McCAFFREY: Deirdre McCaffrey from NGS Energy.

We have met with all the county, three county supervisors. They have recognized that it is a benefit to Pinal County. The location especially would help potentially grow that as one of the generation points for the State of Arizona. We have begun the permitting process for the air permit which would be given by the County. So they are interested in how our continuing conversations go with the city and the whole area. But in general they have been supportive of it.

CHMN. PIERCE: Stay there for a moment.

COM. KENNEDY: I am done. I just wanted that one question.

CHMN. PIERCE: Okay. Well, race back over to Commissioner Newman.

COM. NEWMAN: Yeah. It is my understanding that Pinal County supports the double tracking and station --
you know, there is a railroad project in the same general vicinity. As some of you may know, they support the switching station in the same general vicinity, in the Newman or Picacho Basin, however you want to call it. And I have talked to Mr. Rios, who is supportive of creating more jobs in Pinal County and is generally supportive.

But there is some confusion. There was some -- they did have concern over potential water problems, of the environmental problems. There were letters going back and forth about that. And there is still some concern, but they more or less support the project. That was my understanding from informal conversations I have had with the supervisors. Is that your understanding?

MS. McCAFFREY: Yes. I mean they have asked questions and will continue to follow up for the filing process which will give opportunities throughout the way for -- but we have had no formal filings of opposition to the project or the water use or water disposal.

COM. NEWMAN: Right. But I do think that there is a like, I use the word again, sort of a heightened scrutiny over the water issues, of water table issues. That's my read on the situation.

I want to go back to communication on Cochise
1 County again for the benefit of Mr. Call who is not here
today who would have liked to have attended and probably
would have given a presentation on this. Is there a
chance -- when we look at these numbers, when I ask you
to cost estimate those numbers, I would like you to be
involved with Cochise County as well, because if there
is a chance that they can make their 911 system more
robust, perhaps have the utility of Secretary
Napolitano's assistance in making the message capable of
being longer, that might be a way of not putting the
cost on the ratepayers ultimately or your shareholders,
and we might be able to develop some sort of project
with the assistance of the Homeland Security Secretary
and her staff. And there is some able lobbyists in the
room that would be able to achieve that.

What do you think of that proposal?

MR. CLARK: Well, Commissioner Newman, that
certainly is something that we can look into. I
understand there are two options in this arena. One,
there are vendors who have this type of system, that you
subscribe to their system and then they keep the phone
lists, they maintain the system, they do everything
else, and then you just pay a fee to use it. Then you
can purchase outright the system, have that technology
in house. So we will look at all of those aspects and
make the proper decision which is best for the
ratepayers or shareholders, the company, all involved.

COM. NEWMAN: Okay. Thank you so much.

Long-term contracts for the sale of gas, I just
got back from a meeting of the energy bar and was
interacting and talking to several of the California PUC
officials, trying to trade notes with them about gas
issues in the west. And I guess I had heard that there
is a very, very, a long-term contract that PG&E, I
believe, the northern California electric utility got a
very good deal on long-term gas prices.

Now, there is this economic nexus that -- I am
not, I am not the economist or the mathematician to
understand these price differentials, but because -- so
California just got a very good long-term contract. I
would like to see Arizona distributors, I am sure you
yourself would like to see those kinds of contracts
received. And that kind of shifts away from this
storage issue, if you know what I mean. If you get
those long-term contracts, there is maybe less need for
storage. The consumer gets the best deal.

Can you speak to that?

MR. MOODY: Sure. I will keep it, try to keep
it appropriate to this forum. Always remember that I
like, as a gas guy, I always want to say out loud that

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five years ago $8 would have been a really good deal.
And today if you were paying $8, there is some supplier
who is doing a dance and a jig because you are $4 over
market and he is making money.

So to specifically answer your question, we
always look at longer term contracting. And it could
have the outcome you just described, or it could have an
unthought of outcome, which is back in the days when we
were all going to need LNG. A local distribution
company has extremely variable load, and we were going
to need to buy the gas the same amount every day. And
as I alluded to earlier, in order to secure a deal like
that, you would go a little longer term.

This was what it was like five or six years ago.
You would buy it, say, from Costa Azul and transport it
back through El Paso to some Arizona storage area. And
that would be the only way you could accomplish it,
because on the days you didn't need it, you would still
have to take the gas or put it into storage somewhere.

So without being -- don't take that as an
indirect answer. Just maybe hopefully you will
interpret that it is a complex answer. And we will
certainly, as we put together our economics for each
company, we are all, we have all looked at each other's
nonproprietary stuff, and these things all will get

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considered and we will have a chance to look at them in
the open.

COM. NEWMAN: Okay. Actually that calls for follow-up on that issue. I think it is an important issue. Staff wants to speak to that as well,
Mr. Chairman.

CHMN. PIERCE: Go ahead. Yes, please.

MR. GRAY: Mr. Chairman, Commissioner, I am Bob Gray with Commission Staff.

I think my perspective would be that even with long-term contracts it doesn't reduce the need for storage, because your typical gas supply contract has this force majeure provision that allows the producer to get out of providing the gas if there is weather circumstances like we have seen. That's why you saw in the Southwest Gas graphs there is a big difference between what was contracted for and what they actually had come through the pipeline. And I think even with the long-term contract with a producer, say, in the San Juan Basin, you would probably still have the issue where that supply becomes a little bit interruptible when the weather gets colder.

So I think you would still, you would still want gas storage even if you did get some long-term contracts.
COM. NEWMAN: You want both strategies in place to get the best deal for the consumer.

MR. GRAY: Certainly, yes.

COM. NEWMAN: Okay.

CHMN. PIERCE: All right.

COM. NEWMAN: That's it for now.

CHMN. PIERCE: Commissioner Kennedy.

COM. KENNEDY: Thank you, Mr. Chairman. This will be my final stint at this.

I don't want Southwest Gas to run out of the room right now, but I have a couple of tough comments to make. I am glad that the two executives flew in from Nevada today. I do realize that Southwest Gas is a Nevada based company. You are not local. You are not Arizona bred. But you are a provider of service, and I really expected more from you.

There are some great people here locally that represent Southwest Gas I have known a long time. But when we have to wait for direction from an executive from Nevada, it makes me uncomfortable.

With that scenario, which one of you today wants to take the blame for the breakdown in communication?

MR. CLARK: Well, Commissioner Kennedy, let me start off by saying that I am a Tucson resident. I have lived in Tucson now over five years. That is where I
live. That is where I serve. And that is my home and
where I will continue to be. So I am an Arizonan.

COM. KENNEDY: Okay. So my fault.

So you are going to take the blame for the lack
of communication in southern Arizona? And the reason I
say that, I just happened to be in Tucson the week that
this all occurred for another event and got bombarded
with nothing but Southwest Gas issues, problems. They
were angry. And I felt like I walked into an ant bed.
But I mean, I mean I was elected to do this. So I am
not unhappy, but I do think that Southwest Gas and their
customers here in Arizona deserve a little bit more.

Which one of you has already decided when your
first mock emergency exercise will take place using the
event as a learning tool?

MR. CLARK: Well, Commissioner Kennedy,
Southwest Gas has already had one initial meeting with
El Paso in which we have talked and discussed the issue
at hand. We are looking at sharing information. We are
looking at modeling our systems on both sides, on the
transmission side from their part, on the distribution
system on Southwest Gas' part, so that we can really get
our arms around what opportunities in the future we
might have to work together and ensure that, if there is
infrastructure that needs to be installed, that we take
a good hard look at that, or whatever we can do on a
cooperative basis to work together in that arena.

I believe that we will set up, as El Paso has
talked earlier today, a mock exercise. Southwest Gas
will participate in that exercise. We would love to get
our side on the distribution side to jointly interact
with the transmission side to look at this, this weather
related event that we have just gone through.

As far as the communication goes, I would like
to address, and I have got Libby Howe who is our PIO,
sitting right behind me --

COM. KENNEDY: You are not passing the buck, are
you?

MR. CLARK: No, ma'am, no. I wanted to say
that, I want to be on record saying what a great job
Libby did in communicating with our customers, with the
media, and with all the resources that we had at our
disposal.

Now, we recognize that there are challenges,
that our world has changed even in the past year, and
that some of the social media that is prevalent today,
we are a little behind the times. But we are willing to
admit that and now try to catch up. And that's the
commitment that we have, is that we need to take a good,
hard look at the communications, the way it happened
during this event and what we can do in the future to 
better talk to the customer.

We understand that the primary answer they 
wanted was when will you get to my house. We could not 
answer that question adequately to our customers. We 
would like to be able to do that in the future. That 
will be our objective, to try to find the methodology or 
the technology which will allow us to do that.

COM. KENNEDY: Mr. Chairman, Mr. Clark, I take 
it you have not seen the letters that have been included 
in the docket from responses of customers to the letter 
that was sent out. I am assuming that.

MR. CLARK: I have not seen any of the letters 
you are speaking of, no.

COM. KENNEDY: I invite you to look at those 
letters in the docket. In fact, the Chairman read from 
a couple of those letters earlier today. And attached 
to those letters that they sent us is the letter that 
you and Mr. Moody, I believe, sent out.

MR. CLARK: Mr. Shaw.

COM. KENNEDY: Shaw, thank you. So --

MR. CLARK: Yes.

COM. KENNEDY: -- I am not pointing fingers at 
your PIO. I just want to make sure you are not passing 
the buck. But I want to make sure that you hear me
louder and clearly.

MR. CLARK: We hear you, Commissioner Kennedy.

And we will shoulder that responsibility.

And I would, I would just like to say as well that we have received many complimentary letters from customers within the outage areas thanking us for our promptness, thanking us for the courtesy of our field people, of coming into their homes and restoring their service. So we understand that, in any event, we can learn from it, we can critique it, and we can strive to do better in the future. And that is our goal.

CHMN. PIERCE: Okay. Finished? Thank you.

And I just want to say that where systems need to change for the company isn't necessarily in Tucson and southern Arizona. And that's why you are here. You have a statewide system and you involve other states.

And so really whether someone is at fault directly for what happened in Tucson, that's one thing, but the overall fault in this lies with the system isn't what we wanted. And somewhere along the line somebody is going to be responsible for making sure that it changes.

And, you know, Mr. Shaw is here, and he is at the top of that. I am sure he is going to make sure that somebody is going to be the person responsible.

And for us, I think whoever that is and who is going to
be leading those changes, we ought to know who is going
to be assigned that so maybe we can get updated as that
process is going along. We know who our, we know our
local folks really well, but they are not the ones that
are going to be check tasked with this. And we would
kind of like to know who that is.

MR. CLARK: Well, Chairman Pierce, I suspect I
will be charged with that responsibility, being the vice
president in southern Arizona. So I will, I will take
that responsibility on. We will communicate with the
Commission as we move forward. And the folks behind me
will certainly be of great assistance in doing that.
But I will take that responsibility on.

CHMN. PIERCE: All right. Then, then you are
going to take it on for the whole company to make --
because whatever system you develop ought to be one in
which the company is going to use, or somewhere. I mean
that's -- this is an issue in southern Arizona today.
It could be an issue in Southwest's service territory
somewhere else tomorrow. So we just want to make sure
that we have that consistency and we know who is
resolving that for the company. And if it is going to
be you, that's fine, because if it gets resolved in
southern Arizona satisfactorily, that ought to be maybe
a company standard.
MR. CLARK: Okay. From the respect of infrastructure, that will be my responsibility. For technology, I will have to look to some of my staff co-workers to assist in those decision processes and in that arena. So I will be responsible for the infrastructure, ensuring that pipelines and facilities are in place. And then we will look at the technology side more than likely out of our staff groups in Las Vegas.

CHMN. PIERCE: Well, your customers are going to want to know, you know, when you say these things are happening, well, who are the people assigned, what is the schedule to make sure that we are going to have a system, when is it going to be tested if there is reverse 911, is there going to be media letting people know you are going to get a call and it is a test, those types of things.

So I am just saying for those who are without service, they want to know that everything is legitimately on a time schedule to be improved. And I think that's what we would like to be able to report to them as well. We are almost --

MR. OLEA: Mr. Chairman.

CHMN. PIERCE: Yes.

MR. OLEA: Steve Olea.
CHMN. PIERCE: Okay, Mr. Olea.

MR. OLEA: Yes. And if I could just add to something that both you and Ms. Kennedy were talking about, since I already stole one of her questions, is that we had asked and Mr. Johnson had called the Department of Emergency Services for the state and asked them to be here at this meeting. They could not be here because they are in the middle of doing their mock exercise for Palo Verde.

But I think that, you know, some of this ties in to everything that has been talked about here. I think maybe the Commissioners at a Staff meeting should get the Department of Emergency Services there and talk to them about them coming up with a mock exercise that would cover something like this for the gas companies, but something similar for the electric companies.

And the reason I say that is because of what happened in Texas. And in our talks with the, you know, with the companies we found out that in Texas, when the electric companies did their curtailment plans that were approved by ERCOT, that the gas facilities were not part of the critical structure that was to be left on. And at the time that made total sense, because I am sure that in Texas, the way we do here, they do mock exercises, but when they tested in Texas they probably
tested the electric companies in the summer. And when you do that in the summer, the gas companies are not critical in the summer. But I don't think anybody thought of the electric companies losing power in the middle of winter that would at the same time turn off the gas companies.

So I think maybe somehow that, as the state emergency services does, do their development of mock exercises for different things that could happen. Perhaps in some kind of cooperation with the Commission and with the different utilities, you know, all of us could come up with a mock exercise that would do something like this that would incorporate the reverse 911 or, you know, some kind of radio emergency messages or something.

Because I know a lot of the calls that we were getting from customers was I can't find out what is happening or like where do I go because I don't have heat, and so like is there a school, you know. So it is that type of thing that I think the emergency services, state emergency services could coordinate with the different county emergency services on what happens when this happens. As you said, if this were to be a power outage in the middle of August that lasted for four days, you know, what is going to happen? You have to
have a place to put people. And somebody at the state level has to be in charge of that. But I don't think that, or at least we haven't thought of and I know that emergency services hasn't thought of, okay, what happens if you have a major gas outage together with a power outage in the winter, well, what happens if you have the same thing in the summer. That's something that I think, you know, that could -- that would bring into effect what you had been talking about and also what Commissioner Kennedy had mentioned.


COM. NEWMAN: This is my last question.

CHMN. PIERCE: And then we are going to wrap this up because otherwise we are going to need to go to a break, and I think we can do it without going to a break.

COM. NEWMAN: Yes, I just have a few remaining questions. And actually the Staff anticipated also one of the things I was going to say. So I will start out with what Steve said for the purposes of transition.

Mock exercises are a good idea. Blacktop exercises is another way of describing them in the emergency services field. So I certainly agree with Staff that, and with the Commissioner, with the Chairman by his question of summer/winter analysis, that we
should have blacktop exercises, summer problems, winter problems, the nexus between the electric grid and gas providers. And I think I will be asking for that.

To the folks that represent the storage folks, and that extends to your competitors I think who also are in competition with you to try and get storage in Arizona, and whoever is listening to this who wants to enter into the foray of trying to get the least cost storage that we can in Arizona, and the safest storage, that we, that the Commission has been available before to review just for our eyes only some of these cost numbers. And that would be very helpful to all of us. And we have done those sorts of agreements with our other companies in the past.

And you could trust us to live up to our sort of judicial integrity not to pass on information. We take this job very seriously. But we want to see these numbers and we will look at them so we have an idea of what they are. It is very important for us to know that because it could end up hitting the ratepayer one day, and we will all end up paying the ratepayer one day. That's part of our job.

With regard to consumer complaints, Steve and Staff, I was going to ask you a number of questions. But I have -- have we gotten back to all the folks that
have reached Mr. Martinez in our Tucson office who took
the bulk of the calls for southern Arizona? Has there
been a written response to them? And if we do a meeting
in southern Arizona, I would hope that the people who
contacted Mr. Martinez and others in our consumer
complaints division would be noticed of the potential
meetings in southern Arizona it looks like we will try
to coordinate with the Southwest Gas rate hearing.

MR. OLEA: And, yes, Mr. Chairman, Commissioner
Newman. And I got this information from the Consumer
Services Staff. We had a total of 259 calls in to our
Consumer Services group that dealt, well, with the
outages in Tucson and Sierra Vista. And there was, 180
of those were inquiries and 79 were complaints. And I
asked my Staff to actually define what is the difference
between a complaint and an inquiry.

An inquiry is one that we can answer on our own
that we answered. So there is 180 that we answered on
our own. And those have been closed. Those that are
complaints are those that we cannot answer on our own so
we forward those on to the company. And they will
provide a response and then we will provide that
response to the customer. And if that closes it, then
it is closed there.

COM. NEWMAN: Okay. But given the fact that we
will have more hearings, I am sort of making a, you
know, soft request that these folks be particularly
noticed because they got through to us. And we haven't
ignored them, I know. Staff does a good job. But I
just want them to understand that we will have southern
Arizona hearings, if they have other information for us,
you know, that they are invited to come to provide.

MR. OLEA: And if we still have their contact
information, when you set up that meeting we can notify
them.

COM. NEWMAN: That's fine. And, Mr. Chairman, I
will be done in a very quick --

Oh, with regard to the blacktop exercise, I
would just add not a question as much as direction from,
at least from me. City, county, ACC Staff, as was
mentioned, State Emergency Services staff, you might
even invite, you know, emergency service people from
other counties, work through the county organization and
the municipal organizations in the state because
everyone, they are -- all local government has concerns
about this.

And then the one other point that I will
conclude with is this. We, Arizona spends $2.5 billion
in importing natural gas from out of state. As you
know, we don't have natural gas. That's $1.7 billion in
one pot and another approximately .8 billion in another
pot. That's a mas o menos number that I came to around
a year ago. I am not sure exactly what it is today, and
it is mercurial in some ways, but approximately $2.5
billion. That is an awful lot of money that our
ratepayers are paying for a resource that we don't have.
And I am a bit on the soapbox on this, but
natural gas is much cleaner than coal. We have a
preference for natural gas. However, it is very costly.
Right now it is down. Volatility could get even higher.

I just read a New York Times article that
appeared on Sunday. And I ask that everybody in this
room -- in fact, I am going to pass it to the
Commissioners after this meeting with regard to the
shale gas future that is allegedly so promising causing
potentially huge problems for water resources on the
east. It is an incredible study that they have done. I
also understand that the EPA is going to be coming out
with reports based on their working together with the
New York Times in a very special investigation. It was
a three-page article in this past Sunday New York Times.
So I ask that everyone look at that.

But, so we are sort of -- we need your gas to
help us have a good energy system and a clean energy
system and reliable energy system. So we are just
hoping that when I mention that number and how big a
number that is, you know, perhaps it could get less if
we did more renewables and, but, and that's something
that I want to look forward to working with the gas
companies in the future.

But this is no small matter. We pay
$2.5 billion, which is a big chunk. And we would like
to see the system work better. I am not going to go
chastise anyone here; although, there are lots of
customers who probably, if they were here, you know,
would chastise you. But that's just part of our job.
So we will have to put on our flack jackets when we meet
with them. But I think that the customers deserve the
benefit of all that money that they are paying for the
natural gas and indirectly supporting or directly
supporting, you know, your management, your employees,
and your shareholders.

Just last response given that number from both
pipeline and Southwest Gas as well.

CHMN. PIERCE: If you could in as short amount
of time, whoever wants to respond.

COM. NEWMAN: That's the only question I had.

MR. MOODY: There is no doubt that over the past
ten years, if you average the cost of gas, the commodity
is much more expensive than the infrastructure. But we
are not typically meeting to discuss the last failure. We are talking about rates. And every decision that we make balances the services we provide against what our ratepayers pay. We would like to think of that in terms of stockholders because they are deemed greedy, but the reality is every rate paid a ratepayer somewhere pays it. And we do that prudently. And that is the interaction between our commissions.

And you are right, two and a half billion dollars is a lot of money. And we all, as utility, as the Commission, shepherd that money hopefully in the most efficient way for our customers.

CHMN. PIERCE: Okay. I was going to ask a question of El Paso, and then we are going to wrap up. The map you have given, and I noticed it many, many times, but the San Juan Basin sort of meanders around Four Corners and picks up a little bit of Arizona. Is that an artist using, you know, just, you know --

MR. CLEARY: PowerPoint art?

CHMN. PIERCE: Or is that really true? Do we have natural gas in Arizona?

MR. CLEARY: Let me ask.

MR. BOWE: I believe the answer is there are a couple of wells in the far northeastern corner of the
state.

CHMN. PIERCE: Well, there you have it.

MR. BOWE: They won't be able to make up for the problems.

CHMN. PIERCE: But I mean the San Juan Basin does provide some of that, so, but that's it, not very much.

Well, I want to thank everyone. We have had, I think, a pretty thorough discussion of the issues.

One thing, I know in the detailed discussion around Southwest Gas' ability to communicate with their customers on what happened and based on the letters and e-mails that we have, there is a lot of rumor and things that they need -- they would like to understand better. And I don't think all of those things were fully vetted today. And I think having the company have access to the correspondence we receive so that the company is prepared for that as we go out and talk --

And I have had a little discussion with my Staff. It is probably not likely we would do this in conjunction with the rate case since that's really going to be ready to go for us next fall. And I don't think -- this coming fall. And that's not going to work. So we are going to try and organize something in a very short amount of time. We are going to check with
people's calendars between now and the end of the month,
if not that, the first part of April, to try to make
sure that we get out to discuss this issue. But I would
like to make sure in that amount of time the company is
prepared and has the information we have from our
rate -- your customers, our constituents and so that you
are prepared for that.

And I believe, to the extent that folks that can
participate from other than Southwest and El Paso, that
there might be questions so that we can talk about some
of these other issues.

One thing I know is that, if we would have gone
to Tucson and Sierra Vista with this, we would have had
this discussion, it would have taken us, you know, four
hours. And most of our constituents, your customers,
would have liked this information but they don't have
that kind of time in the evening to hang with us and be
able to comment. Many of them would want to comment.

So what we need you to do is really put it in an
easy form of writing. I mean that's what I would advise
you to do, at your expense, to make sure that, you know,
look at their questions and answer those questions.
Maybe put them on your own website, have your
presentation today available to us for our website, and
so that information is out there. And we can, and we

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can go back and e-mail the folks who have contacted us
and attach as much information as possible to them. And
my Staff and I talked about doing that. And we can
coordinate that with the Commissioners to make sure that
those that are really agitated have the information so
that, when we have a public hearing, you know, it is
productive.

And that's what I would like to see, and have
the questions answered and come prepared to answer those
questions, come prepared to accept anger towards us,
towards you. People are upset. And we want to do this
in a soon enough time to where it, to where we will get
a good turnout so they will feel we weren't neglected.

Some people thought we were neglecting this.
The fact we didn't come out and jump in the middle of it
while you were busy lighting people back up really had
people concerned. But there were others who probably
would have thought don't do anything, Commission, that's
going to slow this process down in getting my gas. And
that's kind of how I looked at it. We were going to
look into this, but we are probably not going to help
the cause in getting people's service back on. It was
important for us to encourage you all to do it, but most
certainly what people elect us to do is to make sure
these things don't happen again as best as humanly
possible. And so that's what we would like to do.

So, again, thank you all for your participation.

I know many of you have come a long way at great expense
to make sure that you were a part of this. And it was
very informative. And I hope you agree, too.

If someone has a parting comment, I would give
you maybe ten seconds, but I think we have exhausted it.

Anyone else?

(No response.)

CHMN. PIERCE: Then good. Then we are going to
be adjourned. Thank you.

(The proceeding concluded at 3:00 p.m.)
STATE OF ARIZONA  )  ss.
COUNTY OF MARICOPA  )

I, COLETTE E. ROSS, Certified Reporter No. 50658 for the State of Arizona, do hereby certify that the foregoing printed pages constitute a full, true and accurate transcript of the proceedings had in the foregoing matter, all done to the best of my skill and ability.

WITNESS my hand this 11th day of March, 2011.

Original transcript filed with Docket Control signed by Court Reporter

COLETTE E. ROSS
Certified Reporter
Certificate No. 50658

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