

1 BEFORE THE ARIZONA CORPORATION COMMISSION

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4	IN THE MATTER OF THE COMMISSION'S	)	DOCKET NO.
4	GATHERING OF INFORMATION CONCERNING	)	G-00000C-11-0081
5	NATURAL GAS OUTAGES IN THE	)	
5	SOUTHWESTERN UNITED STATES.	)	
6	_____		) OPEN MEETING

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9 At: Phoenix, Arizona

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25 ARIZONA CORPORATION COMMISSION

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

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BEFORE: GARY PIERCE, Chairman  
9 BOB STUMP, Commissioner  
SANDRA D. KENNEDY, Commissioner  
10 PAUL NEWMAN, Commissioner  
BRENDA BURNS, Commissioner

11

12

APPEARANCES:

13

14 For El Paso Natural Gas Company:

15 Mr. Jim Cleary

16

For Transwestern Pipeline Company:

17

Ms. Shelley Corman

18

19 For UNS Gas:

20 Mr. Michael Patten  
Mr. Nathan Shelley

21

22 For Southwest Gas Corporation:

23 Mr. Justin Lee Brown  
Mr. Bill Moody  
24 Mr. Gary Clark

25

1 APPEARANCES:

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For NGS Energy:

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Mr. Daniel E. Pastor

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Mr. Bob Gray

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1 CHMN. PIERCE: We will now organize for Item  
2 No. 21.

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

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

23 What we are going to do, we will have someone,  
24 whoever you designate from your company, or there may be  
25 more than one, when we get to questions I am sure you

1 are going to delegate that question to whoever can best  
2 answer. We invite you to do that. And some of you are  
3 going to have PowerPoint presentations, and we welcome  
4 that. But we would, to start out, like to take five or  
5 ten minutes, and it will go in this order: El Paso  
6 Natural Gas; Transwestern, these are our pipeline folks;  
7 UNS Gas; Southwest Gas; and then Natural Gas Storage.

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

16 So let's begin with El Paso Natural Gas.

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

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

24 MR. CLEARY: Yes, sir.

25 CHMN. PIERCE: -- of El Paso? Well, welcome to

1 you, too. I don't think we have met before.

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

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

6 MR. CLEARY: Let me --

7 CHMN. PIERCE: We have them.

8 MR. CLEARY: Great.

9 On the first page, just to give you an overview  
10 of El Paso Natural, we are a large interstate natural  
11 gas provider, transporter. We effectively move gas from  
12 supply basins like the Anadarko Basin, San Juan,  
13 Permian. We take gas into our system from pipeline  
14 interconnects which might bring gas to El Paso Natural  
15 from the Rockies and we deliver to markets across the  
16 southwestern U.S. and Mexico. In Arizona we have nearly  
17 5,000 miles of pipeline. We have 345 separate delivery  
18 meters. And we have 175 employees who are proud to call  
19 this state their home.

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

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

25 MR. GRAY: Yes, absolutely.

1 MR. CLEARY: If you have the presentation,  
2 Commissioners, we are on page 2 or page --

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

9 MR. CLEARY: Slide 3, please.

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

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

24 The key from operating the pipeline is the gas  
25 supply in each day should equal the gas supply out



1 that's delivered to the market each day.

2 This is a picture of the El Paso Natural system.  
3 And I will just note the major supply basins so you can  
4 orient:

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

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

25 In the Permian especially it was exacerbated by

1 power plants went out. And we had in Texas, I think  
2 ERCOT reported 82 plants went down due to cold weather,  
3 representing about 8,000 megawatts. What that did was a  
4 series of rolling blackouts on the ERCOT system and on  
5 El Paso Electric. El Paso Electric, by the way, is an  
6 independent company, not affiliated with my company in  
7 any way. That interrupted power to processing plants.  
8 When they were down, they had some freezing. When the  
9 power came back on, they had trouble getting back on.  
10 That resulted in less gas supply coming into the system.

11           What we really saw and what was the driver of  
12 this event was on February 1st, 2nd and 3rd,  
13 significantly more gas was taken out of the system by El  
14 Paso Natural's customers than their suppliers were  
15 putting into the system. That resulted in a depletion  
16 of the line pack that we keep in our pipeline to  
17 effectuate deliveries. And with that, as the pressures  
18 in our pipeline declined on the main line, some of our  
19 distribution customers had trouble making deliveries to  
20 their customers, residents, residential customers,  
21 particularly at the far end of their systems.

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

1 increased by 77 percent.

2 At the same time, if you will drop down to the  
3 supply line, Permian from the 31st to the 2nd supply  
4 dropped by 60 percent. What happened, you can see some  
5 market response at the pipeline interconnects, we saw  
6 our utility customers and distribution customers try to  
7 buy more gas to shore up the decline in Permian and San  
8 Juan production at different pipeline interconnects.  
9 This was gas that might have come in from the Rockies or  
10 other regions. And they were able to do so, but we  
11 still on a net/net basis had supply exceeding demand by  
12 15 to 20 percent on each of those days.

13 So how did that gas get delivered?

14 CHMN. PIERCE: You say supply exceeding demand?

15 MR. CLEARY: Excuse me, demand exceeding supply.

16 Thank you.

17 How did we manage that? Well, we managed it  
18 through two assets. We have a storage facility as part  
19 of the El Paso Natural system called Washington Ranch.  
20 That has a maximum withdrawal capability of about  
21 250 million a day. As you can see, on February 2nd,  
22 1st, 2nd and 3rd that ran flawlessly. We were on full  
23 withdrawal and the asset worked just great.

24 The next line is the impact on our line pack.  
25 Now, we have line -- gas in our pipeline that's kept

1 under pressure. And that was depleted. That was  
2 depleted by about 700,000 a day on February 1st and 2nd,  
3 700,000 over a three-day period. And when that  
4 happened, we saw lower pressures on our main line  
5 because there was no, not enough supply coming in to  
6 replenish that pressure. And as we have lower pressures  
7 on our main line, that's when our customers, Southwest  
8 Gas, for example, had trouble making deliveries to their  
9 distribution customers.

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

21 Let me offer a few suggestions going forward.  
22 We are going to look at how we communicate with  
23 customers and process plant owners and generators. But  
24 I think one key takeaway is to see better integration  
25 between the electric sector, for example, for the

1 electric utilities and generators to include natural gas  
2 facilities on their critical infrastructure list, not  
3 only pipeline compressor stations, but processing plants  
4 and other key production facilities.

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

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

24 Finally, I think it is time to reevaluate  
25 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 Now, you may ask why didn't those projects go  
13 forward after an investment of \$40 million. These are  
14 multi \$100 million projects. And to get a project like  
15 that done, you need alignment of market, you need  
16 alignment of regulators, legislators and other public  
17 stakeholders. For various reasons we just didn't get  
18 there when we worked on this in 2004, '5, '6 and '7.

19 But I think the time to take another look at  
20 this is now. And my commitment to this Commission and  
21 to our customers is that we are ready, willing and able  
22 to roll up our sleeves and get to work on evaluating  
23 storage and doing what we can to move it forward, and  
24 certainly looking forward to working with our customers  
25 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 MR. CLEARY: Well, perhaps we could have another  
6 discussion about that off line. Thank you.

7 CHMN. PIERCE: I think so. All right. Because  
8 I was there for that discussion. So were you,  
9 Representative Stump, former Representative Stump.

10 Okay. Transwestern.

11 MS. CORMAN: Good morning, Chairman Pierce,  
12 Commissioners. I am Shelley Corman. I am the senior  
13 vice president of commercial and regulatory affairs for  
14 Transwestern. And I just have a couple of slides to  
15 share with you this morning.

16 First is a picture of the Transwestern system.  
17 I don't think it shows up too good overhead. Oh, wait.  
18 I have some copies here for you.

19 The Transwestern system carries gas supplies  
20 from primarily the San Juan and the Permian Basins to  
21 markets in New Mexico, northern and central Arizona and  
22 the California border. Transwestern does not own  
23 storage. We are connected to one storage facility in  
24 Texas, the Keystone storage facility.

25 On this map you can see that we have 18 major

1 compressor stations. 75 percent of our compression is  
2 gas fired, gas fired compressors. And the other  
3 25 percent are electric compressors, electric motors  
4 where we buy the power from the utility.

5 Turning to the next page, specifically in  
6 central Arizona, we connect to six gas fired generation  
7 facilities. We also are connected to two local  
8 distribution companies with six active delivery points.  
9 We do not reach into the southern Arizona area, into  
10 some of the areas of the gas outages that you are  
11 discussing this morning.

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

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



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

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

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

23 Luckily, on the western part of our system in  
24 the central Arizona and the California border areas, we  
25 had good pressure on the system. We never fell below

1 800 pounds. But certainly our lower pressures on the  
2 main line were affected and impacted some of our other  
3 customers.

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

14 Thank you.

15 CHMN. PIERCE: Thank you.

16 Okay. Now we will hear from UNS Gas.

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

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

1 customers either.

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

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

16 Thanks.

17 CHMN. PIERCE: Thank you.

18 Okay. Southwest Gas.

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

22 We welcome the opportunity to provide a brief  
23 presentation to the Commission, providing an overview of  
24 some of the already written responses that we have  
25 provided to some of the questions the Chairman,

1 Commissioner Kennedy, as well as Commissioner Burns has  
2 presented through letter format.

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

10 Thank you.

11 MR. MOODY: Good morning. Is this on?

12 CHMN. PIERCE: Press the button.

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

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

23 First off, we are here to discuss the loss of  
24 natural gas service to our customers in Sierra Vista and  
25 Tucson. And none of us wants a customer outage. In

1 fact, we all do, from the Commission through all of our  
2 companies, our suppliers, do a lot of planning around  
3 trying not to lose service. And we also do significant  
4 planning investment about service restoration. And we  
5 are going to talk about both of those things today.

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

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

24 Bentek is a research firm that does national and  
25 international gas research. And they sent a market

1 alert out after the event that kind of put in  
2 perspective what the production loss means to all of us  
3 in the gas community. 5.6 bcf nationally is 10 percent  
4 of the gas supply for the entire nation for a day. It  
5 is a big number. And a bcf of that was in the three  
6 basins where we purchased our gas for our Arizona  
7 customers. And so a bcf of gas loss means we don't know  
8 until afterwards when we go out to purchase that gas and  
9 perhaps even the sellers of that gas to us are not  
10 certain whether or not that gas will show up.

11 Think of this as a very real-time situation.

12 Hold on just a second.

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

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

17 COM. BURNS: I need one. Thank you.

18 CHMN. PIERCE: We have got one here.

19 MR. MOODY: Okay, okay.

20 CHMN. PIERCE: Thank you.

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

23 We now know the numbers greater than 50 -- this  
24 report was done very quickly afterwards -- but at least  
25 50 power plants offline. And Texas experienced this

1 peak gas burn higher than any time in their history. In  
2 the meantime, out here in Arizona and across New Mexico  
3 we are having one in 60 year weather, which is beyond  
4 any of our design parameters.

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

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

17 And that red bar really puts in perspective this  
18 weather event. Those of you who are in Tucson, and my  
19 compatriot, Gary Clark here, runs that division, when I  
20 talked to him that day it was cold and it was windy, but  
21 the words were you can't believe the wind. And that  
22 proves it out. In Tucson, Arizona, we had 42 degree day  
23 effective weather compared to a design or a 30 year  
24 event of 35 and a half. That's a lot colder, not just  
25 that little tiny red bar. And notice that Phoenix,

1 Arizona is at a peak as well. I had the opportunity to  
2 visit Phoenix. I never felt it this cold on that day  
3 when I was here. I lived here for awhile.

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

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

24 And then what happens is what was described by  
25 the pipes. They have a responsibility to tell both ends



1 of the pipe if the basin is not performing, either we  
2 are not taking your gas in or, Southwest Gas, your gas  
3 is not showing up.

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

16 And then we also receive routine pipeline  
17 communications. By tariff, part of the agreement is, if  
18 we have a problem or, more importantly in this case, if  
19 the pipeline is experiencing, there are a number of ways  
20 we would learn the condition of our line. One is each  
21 of the people involved in purchasing gas every day have  
22 on their screen the ability to look at the line pack in  
23 El Paso's line, in TW's line. They do that. That is  
24 part of their gas buying process. They can see things  
25 were happening.

1           At the same time the pipeline issues us  
2 warnings. In this case the SOC stands for a strained  
3 condition, which means the pipeline anticipates they may  
4 have a problem, and they signal customers. And we try  
5 to take action. And then it turns into a critical  
6 operating condition emergency, which is the worst  
7 possible condition, which is we are experiencing major  
8 difficulties of some sort. And those are typically  
9 described to us. And then we have ongoing constant  
10 communication that stretches from the pipeline through  
11 our gas monitoring facilities to the division.

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

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

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

21           Southwest Gas does indeed have an emergency plan  
22 manual and a winter operations guide that we follow on a  
23 regular basis during the cold weather portions of our  
24 year. We attend the winter operations meetings that the  
25 Commission sets up around the October time frame. And

1 we take those meetings very seriously. And we look at  
2 our operations. We look at all aspects of our pipeline  
3 systems to try and ensure that we will have adequate  
4 capacities to serve our customers.

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

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

22 We took those steps. We also looked at some  
23 modeling that had been done previously that would enable  
24 us to see what would happen as our pressures and the  
25 demand on our system, if the degradation occurred that

1 we thought in this weather event would occur.

2 And lastly, we implemented, per our winter  
3 operations plan, the process of having our field  
4 personnel out at critical facilities starting at 10:00  
5 p.m. that night throughout the night to monitor and make  
6 sure there were no mechanical issues that would occur as  
7 a result of the cold weather.

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

14 Similarly, in the Tucson area, on the Houghton  
15 Road system, this was the system that we were  
16 particularly concerned with, it services approximately  
17 150,000 customers, and what you see in this graph is  
18 ultimately as a result of this event, the areas in blue  
19 are the customers that we ultimately lost as a result of  
20 not having enough capacity in our distribution system to  
21 serve them.

22 Immediately following the outage, we began the  
23 restoration of service to our customers. We notified  
24 the gas safety group of the Arizona Corporation  
25 Commission and let them know of both the Sierra Vista

1 event and the Tucson event and subsequently kept them  
2 informed as well as other members of the Commission of  
3 what was going on.

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

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

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

22 Now, it might be of interest that in Sierra  
23 Vista they have no television media within that  
24 community. And, therefore, in Tucson, we were providing  
25 information to Sierra Vista, to the Tucson media. But

1 it was not making it down to the Sierra Vista customers.  
2 So we relied heavily on giving updates to the Sierra  
3 Vista Harold, the local newspaper, and multiple radio  
4 stations in the area to keep them apprised of what was  
5 going on with our efforts.

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

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

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

1 that.

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

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

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

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

25           Right now we have discovered that in our

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

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

11 I will turn it back to Mr. Moody.

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

22 This weather event is clearly outside of our  
23 planning criteria. So our planning process says that we  
24 will take this weather event, which hasn't occurred in  
25 February in 60 years, we will put it back into our



1 planning processes. And it will directly impact our  
2 long-range forecast for volume that our customers may  
3 require, our firm capacity commitments on pipelines and  
4 infrastructure improvements. And that's probably the  
5 most important one. In a moment I will comment on  
6 storage. But also understand that we are in constant  
7 discussions with our pipeline providers. We build a  
8 system and they build a system and they have to  
9 peacefully interact in order to serve our customers.

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

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

20 As utilities we responded by forming the Arizona  
21 Storage Coalition in 2007. And as kind of the storage  
22 activity maybe lost a tiny bit of momentum, we are still  
23 all working on it. Commission Staff was involved. We  
24 keep them apprised. And generally this occurs following  
25 the Picacho Basin.

1 And political issues, I wish I was as eloquent  
2 as Mr. Cleary, on the ground, those political issues  
3 revolve around the important work ADEQ does. And brine  
4 injection is an issue, where we are putting water back  
5 into the groundwater. And I am not a scientist so I  
6 can't comment on that. I just know it is an issue. And  
7 then, of course, the municipalities that were affected  
8 by salt that was evaporated that needed to be stored  
9 somewhere near Eloy, they also were out there working.

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

21 Finally, I will conclude our discussion with  
22 just a basic picture. Those green lines represent El  
23 Paso's system in our state. And in a sense, in essence  
24 that red line plus the green line that comes down by the  
25 R in Arizona is where Transwestern would be.

1 Transwestern terminates out in that little red box. And  
2 that little red box represents the Picacho area.

3 So all of our pipeline systems are around that  
4 area, and there happens to be salt there. I think that  
5 any of us who were -- you were -- a couple of  
6 Commissioners were in the legislature back in the days  
7 of Copper Eagle. That was quite a bit bigger political  
8 mess back in those days.

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

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

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

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

23 I would like to introduce, if I could, some  
24 folks that are here with me today. Laura Luce is the  
25 president and CEO of NGS Energy. Chad Whited is vice

1 president of project development with NGS. Deirdre  
2 Mccaffrey is the managing director of this project here  
3 in Arizona. Also with us here are Daniel Pastor, who is  
4 from Tetra Tech, who is involved with the permitting and  
5 environmental issues around this project, and then Jim  
6 Bowe, who is with Dewey & LeBoeuf, outside counsel. I  
7 am going to turn it over to them in a moment but I would  
8 just say a couple of words about this.

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

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

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

25 MR. PASTOR: Thank you. I am happy to be here

1 today talking about the Arizona Natural Gas Storage  
2 project.

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

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

23 Just briefly, a quick summary of underground  
24 natural gas storage. I think most people have the idea  
25 how it works, but essentially it is cavern storage in

1 salt, so in a salt body that has suitable properties.  
2 There is the dissolving of a salt cavity for storage,  
3 which is then taken off of the interstate pipeline  
4 system, placed in the storage cavern and then drawn off  
5 whenever it is needed. It is done in a very safe  
6 manner. And it is widely used around the country.

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

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

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

24 So specific to the Arizona Natural Gas Storage  
25 project, we have talked about the Picacho Peak Basin

1 near Eloy. That's where the project is located, about  
2 midway between Phoenix and Tucson.

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

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

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

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

25 And specifically they will -- the project

1 includes a nine and a half mile dual 24-inch pipeline  
2 header that runs up and would tie into the Transwestern  
3 and El Paso pipeline systems with pipeline laterals out  
4 to two power plants.

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

15           Another question that we get a lot is why use  
16 evaporation ponds. Well, there is really only one other  
17 feasible option for brine disposal, which is deep well  
18 injection. From a technical standpoint, you can't  
19 discharge it to the surface. And we have looked at that  
20 option at the site and found that there are no suitable  
21 injection zones there at the site beneath the salt for  
22 that water to be disposed of. We have also looked at a  
23 potential zone above the salt, but there are concerns  
24 about disposal into that interval because it directly  
25 underlies the regional aquifer system and it runs the



1 risk of potential salt water intrusion into the aquifer  
2 system, which we can't have. And that would definitely  
3 be something that would be a concern to Arizona  
4 Department of Environmental Quality.

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

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

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

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

23 The other lead agency that gets involved at a  
24 federal level is the US EPA. They provide permits for  
25 the solution mining steps, so the injection of the water

1 to create the caverns. We have been working with EPA  
2 and have submitted an application for the last three  
3 injection permits for this site. And that's underway.  
4 Those permit applications have been in for about a year  
5 now.

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

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

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

22 A few other folks that are involved as well --  
23 it is a long list of folks, and that's why permitting  
24 one of these projects takes quite awhile -- is the  
25 Arizona State Land Department is involved. There are

1 some properties there that the site would, the facility  
2 would be located on. And then, of course, we go through  
3 endangered species and the potential for any kind of  
4 cultural resources in the area, to make sure we are not  
5 going to have negative impacts on any of those resources  
6 through development of the project.

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

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

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

24 First let's talk definitional terms. Market  
25 area storage, which is what I am going to be touting for

1 the balance of my comments, in my mind is the storage  
2 that is located relative to major load centers such that  
3 peak day and peak hour requirements can be satisfied in  
4 substantial part by storage withdrawals.

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

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

24 Arizona has had the luxury of being able to rely  
25 for its peak day and peak hour requirements on pipeline

1 deliveries without having the benefits of gas storage.  
2 But that has been to some degree a free ride that is  
3 coming to an end as the nature of gas demand in the  
4 marketplace changes.

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

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

19 The availability of pipeline capacity into the  
20 state that allows the state to meet its peak day and  
21 peak hour needs has really caused the utilities to defer  
22 committing to gas storage. And that's why we have been  
23 talking about this now for a long time. I have a sense  
24 of deja vu. I was here in 2003 in a gas storage  
25 conference convened by the Federal Energy Regulatory

1 Commission to explore the need for gas storage in  
2 Arizona shortly after FERC denied an application by Red  
3 Lake Gas Storage project for a certificate to develop a  
4 project up in the northwestern corner of the state. We  
5 have been talking about gas storage in Arizona since  
6 even before 2003. Here we are again. But, as my  
7 colleague pointed out, now seems to be the time for the  
8 commitments that are required to be made.

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

25           Over the longer term, market area storage

1 permits more confident reliance on gas fired power  
2 generation. Given the load fouling characteristics of  
3 gas fired power generation, it is the source of  
4 incremental generation for the foreseeable future in  
5 this part of the country.

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

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

20 There are price benefits as well, which I won't  
21 get into now but would be happy to speak to. Having the  
22 availability of storage in the heart of the market  
23 allows you to be a little bit less of a price taker than  
24 would be true if you had to go to the market in the peak  
25 hour for an additional source of supply. And it also

1 allows you to reduce your exposure to being long gas and  
2 having to dispose of it when there is an opportunity to  
3 store the gas rather than sell it at fire sale prices.

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

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

22 Arizona has been discussing this, as I said, for  
23 a long time. I went back and looked at comments that  
24 were filed with this Commission in 2003 by El Paso  
25 Natural Gas and, at that time, Copper Eagle Gas Storage.



1 The same essential points were made in the presentations  
2 that El Paso filed with this Commission and made today.

3 I point out in particular that it is generally  
4 recognized that where market area storage is available  
5 the customers can meet their peak needs through storage  
6 withdrawals, and that would allow for more efficient and  
7 cost effective and reliable satisfaction of market  
8 needs.

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

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

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

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

10 Just recently, just last week TransCanada  
11 Pipelines lost a main lane in its northern Ontario  
12 system. That reduced the deliveries to eastern Canada  
13 and northeastern United States by several  
14 hundred million cubic feet a day. The system was able  
15 to respond with gas storage located in Michigan and in  
16 Ontario and in the northeastern U.S. to maintain service  
17 to all of the major markets, including the New York City  
18 market which is supplied in part by Canadian gas.  
19 Having storage close to the market was the difference  
20 between a problem and a very serious problem for one of  
21 the most populated areas in the United States.

22 So perhaps that is enough to make the point that  
23 market area storage can really make a difference and  
24 could have made a difference in the excursions that  
25 Arizona dealt with February 1st, 2nd, 3rd.

1 Now, why haven't we gotten there yet in Arizona?

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

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

19 We need contractual commitments from the market  
20 in order to proceed. This is not a cost free exercise.  
21 It is a risky exercise. In order for in infrastructure  
22 improvement to be undertaken, the market has to commit.  
23 And as is true for any long-term relationship, really,  
24 commitment is critical. The customers need to execute  
25 long-term agreements for services that the project would

1 provide. They need to be confident that they won't be  
2 second guessing making the long-term commitment to gas  
3 storage. They need to be confident that they will be  
4 able to recover the costs that they incur in subscribing  
5 to gas storage. All of those things are critically  
6 important for the customers.

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

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

23           With the contractual commitments that we have  
24 been discussing with the Arizona Storage Coalition for  
25 more than a year, in hand with this Commission's support

1 and with the continued cooperation of El Paso Natural  
2 Gas, which has been very cooperative with this project  
3 in the past, the Arizona Natural Gas Storage project can  
4 result and in about three years can provide the kind of  
5 insurance that this state really requires for its gas  
6 delivery infrastructure.

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

12 CHMN. PIERCE: Thank you.

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

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

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

1 up too long on the break.

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

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

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

1 And that's all I have. Thank you.

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

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

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

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

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

21 Here is what I would like to do, and if we could  
22 hold it to this. We have an order on the board as far  
23 as how everybody has weighed in. And what I would like  
24 to do, instead of having any of us go too long, what I  
25 would prefer is each of us as Commissioners maybe take

1 five minutes, then pass it on to the next one. Then I  
2 will just come right back in that order, if that works  
3 for everybody, until we are done. We will get to  
4 everybody's questions but I would like to give everybody  
5 a chance to take a breather and let someone ask a  
6 question. Will that work? All right.

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

12 COM. STUMP: Like Jeopardy.

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

19 Thank you, everyone, for being here.

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

23 Commissioner Newman.

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

25 Good afternoon -- good morning -- good afternoon



1 to everyone. I appreciate this briefing. Thank you,  
2 Mr. Chairman, for scheduling this hearing.

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

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

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

24 And as some of you may know, I represent  
25 southern Arizona, or at least I am from southern

1 Arizona. I represent the whole state but I am the one  
2 Commissioner who lives in Tucson, was a former Cochise  
3 County supervisor and lives in Bisbee and knows the  
4 Sierra Vista area very well. So I am very -- I know a  
5 lot about the neighborhoods where it went down, talked  
6 to individuals that were affected. And it is a serious  
7 thing.

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

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

25 Is that the truth, that it took six or seven

1 days? Which is the true statement?

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

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

16 What we are seeing, Commissioner, is within that  
17 two and a half day window, both in Sierra Vista and  
18 Tucson, that we had made our first attempt to knock on  
19 every door and restore service to customers. It is our  
20 policy that after that first attempt we begin  
21 immediately thereafter and make a second pass and knock  
22 on every door that customers weren't home the first  
23 time, and then we make a third pass. If a customer  
24 hasn't been home for all three of those knocks on the  
25 door, then we leave a door tag. We give a specific

1 number for that customer to call and our call center is  
2 then alerted when that call comes in that they  
3 immediately dispatch a technician because they recognize  
4 that that customer is within the outage area. And that  
5 technician then is immediately dispatched to that  
6 customer's home to restore service.

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

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

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

24 MR. CLARK: That will have to be, Commissioner  
25 Newman, that will have to be provided at an additional,

1 at an additional time. I don't have that data right in  
2 front of me, but we can get it, yes.

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

8 MR. CLARK: Okay.

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

16 Where is the El Paso folks?

17 MR. CLEARY: Right here, Commissioner.

18 COM. NEWMAN: There you are. And I was told --  
19 their lobbyist at the time was Mr. Ober from Policy  
20 Development Group, eminent lobbyist, former chief of  
21 staff of Senator DeConcini. And a gentleman who I don't  
22 see in the room today who was the western representative  
23 for El Paso came to me and said after years of  
24 exhaustive study El Paso was actually looking at a  
25 potential of putting storage in the same general area of

1 the Picacho Basin. And I was rather surprised by this  
2 visit. And it was one of my first, as I said, one of my  
3 first meetings.

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

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

19 CHMN. PIERCE: Speak into the mike, please.

20 MR. CLEARY: Sure. Mr. Chairman,  
21 Commissioner --

22 CHMN. PIERCE: Just go ahead and slide it over.  
23 It will move.

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

25 I, Commissioner Newman, was not in that meeting

1 at that time; although, I was president of El Paso  
2 Natural Gas and president of the Western Pipeline Group  
3 at that time.

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

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

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

25 CHMN. PIERCE: No, we are going to come back.

1 But we are almost ten minutes and I wanted to keep it  
2 five.

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

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

9 COM. NEWMAN: Okay.

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

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

21 While in the best of all worlds you would  
22 dispose of your brine underground, the use of surface  
23 evaporation ponds for a variety of different purposes is  
24 well understood. There are a lot of them around Arizona  
25 and elsewhere in the west.



1 COM. NEWMAN: Okay. I guess, Mr. Chairman, you  
2 would like to move on now?

3 CHMN. PIERCE: Yeah. Then we will come back.  
4 Commissioner Stump.

5 COM. STUMP: Thanks, Mr. Chairman.

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

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

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

25 So in our history we have looked at individually

1 as customers. And I am going to be loosely speaking for  
2 my fellow utilities. We don't know everything each  
3 other does, but, honestly, serving the customers of  
4 Arizona, we work fairly closely together. And a project  
5 this big is going to take all us for to play in order to  
6 pay to it.

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

22 The Arizona Storage Coalition works diligently,  
23 that's all utilities in the state, works diligently with  
24 each project within the confines of we can't do prices  
25 and we can't do volumes because we have got national law

1 against us on that one but we can certainly talk about  
2 the projects and understand them as a group so that it  
3 is simple to make sure that we get something we really  
4 like.

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

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

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

22 Is that adequate?

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

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

3 MR. MOODY: Absolutely.

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

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

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

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

24 So I think the short math is that had Washington  
25 Ranch not been operating at that level, you would have

1 seen probably a day quicker or maybe a day and a half  
2 quicker. And they would have been more severe. You  
3 know, we could model it if you are really interested in  
4 it but that's my quick accounting look at the answer.

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

10 MR. CLEARY: I think --

11 CHMN. PIERCE: I would keep going in order.

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

18 Again, think about the problem was, on our  
19 system, was the line pack being pulled down by about  
20 360,000 a day. So taking the Arizona Gas Storage  
21 project, or at 400 million, I think that would have  
22 shored up significantly. It would have put us in a line  
23 pack neutral mode and, in my view, on a broad look,  
24 probably would have averted the problems. We would have  
25 to model it to give you a precise answer, but if you say

1 the premise is ins and outs have to equal on the  
2 pipeline, that would have gotten us there.

3 COM. STUMP: Okay. Appreciate it.

4 CHMN. PIERCE: Thank you.

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

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

22 It would seem that the ACC should require at a  
23 minimum that each utility have a well thought-out  
24 customer notification system in place in advance that  
25 would include media and all appropriate public safety

1 and other relevant entities in the event of service  
2 disruption of any size.

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

20 And the second one is is the company doing  
21 everything in their power. Now, the company feels like  
22 they did everything in their power. But I think in the  
23 future, if there is an incident like this, we ought to  
24 have some system in place to borrow assets, people, to  
25 get this job done.

1 Is that something that is feasible?

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

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

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

23 In this outage, we did something that we haven't  
24 in the past done. And that is typically in an outage in  
25 the past, we would turn every meter off. Then we would



1 purge the entire system. And then we would begin the  
2 relight process. And in so doing, we could predict a  
3 little closer than in this particular case.

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

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

21           Let us take a good, hard look at that and look  
22 at what we did in house with our own personnel, how we  
23 could have perhaps brought in other people, if that  
24 would have been more efficient for us. We feel we were,  
25 we exceeded our expectations in getting our customers

1 back on in this situation. So we will take a good, hard  
2 look at that, Mr. Chairman, and see what is that fine  
3 line balance that we need between safety, efficiency and  
4 restoring that service to our customers.

5 CHMN. PIERCE: Thank you.

6 Commissioner Burns.

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

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

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

23 And when I heard that, I called a couple people  
24 I knew in the Sierra Vista area because I wanted to know  
25 what they were experiencing. And when I listened, I

1 don't remember if it was Mr. Clark or Mr. Moody said,  
2 you know, you already have got an unhappy customer  
3 because they don't have their service that they want --  
4 that was Mr. Moody that said that -- well, that's true.  
5 However, I really got the sense from a lot of them that  
6 they just wanted to know more, they wanted more  
7 information. A lot of them who were -- you know, they  
8 are reasonable people. They understand things happen.  
9 But they said, you know, I am without power, I have got  
10 Southwest Gas, they aren't telling me anything, they are  
11 not telling me anything, I can't get any information.

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

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

1 simply didn't work like it was supposed to.

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

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

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

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

1 of tracking and knowing that that situation was in the  
2 home.

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

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

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

23 But there were other things going on, too. You  
24 know, when you read the e-mails, space heaters sold out  
25 very quickly. There were contacts with SSVEC, their

1 electric provider, to make sure were they going to be  
2 able to -- obviously there was going to be a bigger draw  
3 on electricity. And they felt comfortable there. But  
4 all those things going on there teach us all about the  
5 things that need to be addressed, just like space  
6 heaters being sold out.

7 I just wanted to jump and ask -- oh, one other  
8 question before I move to that one. I probably am out  
9 of my five minutes. One of the things I heard, the  
10 e-mail was that Southwest Gas employees should have been  
11 working around the clock, not just daylight hours. Can  
12 you respond to that?

13 MR. CLARK: Yes. Mr. Chairman and Commissioner  
14 Burns, we have found historically that we work as many  
15 hours as our customers are comfortable for us to knock  
16 on their door. In the field historically we work from  
17 7:00 a.m. to 11:00 p.m. at night. We have found that  
18 after 11:00 that customers are leery of hearing that  
19 knock on their door and responding.

20 So in order to facilitate that plus give our  
21 people a little bit of rest, we would work from 7:00  
22 a.m. to 11:00 p.m. at night and we continued that  
23 process clear through the weekend. Our call center was  
24 opened extended hours on Friday. We had a minor glitch  
25 with our e-mail system and we kept our call center folks

1 in the office answering the phones until, again, 11:00  
2 p.m. when those calls diminished and we felt we could  
3 allow them to go home.

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

10 COM. BURNS: I think my time is up.

11 CHMN. PIERCE: Thank you.

12 Commissioner Kennedy.

13 COM. KENNEDY: Thank you, Mr. Chairman.

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

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

24 While emotions run high, jumping to conclusions  
25 before the facts are known is not, was not helpful. I

1 believe being here today we are gathering the facts. We  
2 can't solve the problem until we identify the problem.  
3 I am concerned that someone in Texas ordered a rolling  
4 power outage that affected Arizona. I am deeply  
5 concerned about that. Without communicating that power  
6 outage to all affected stakeholders, Arizona truly  
7 suffered.

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

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

22 CHMN. PIERCE: Okay. Thank you.

23 And we are going to come back in the same order  
24 after lunch. But let me just say we have a rate case  
25 that Southwest Gas has filed. And I think in the coming



1 weeks we can actually, in conjunction with that, where  
2 we would normally go out and take public comment on  
3 that, we can actually, so to speak, kill two birds with  
4 one stone and be able to go out and take public comment  
5 on any issue the public wants to talk about. And I  
6 suspect Tucson, Sierra Vista and Green Valley, different  
7 areas that maybe get impacted by the company, as well as  
8 other areas of Arizona, especially if there is going to  
9 be discussion down the road and they see it from this,  
10 that there is discussion about storage and to get public  
11 input about those types of things.

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

1 and what they want to see the companies, the various  
2 companies do in the future.

3 We are going to break for just a minute.

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

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

7 COM. KENNEDY: That's okay.

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

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

20 Commissioner Newman, we need to wrap up here.

21 COM. NEWMAN: Yes. To the point that  
22 Commissioner Burns and Commissioner Kennedy made, and I  
23 was going to make on my next point if I had another  
24 minute to do it, it is now -- I will make it a majority  
25 of the Commission right now. I am truly asking the

1 Commissioner, all the Commissioners and the Chairman to  
2 schedule meetings in Sierra, Cochise County and Pima  
3 County. I think we need to hear from the customers. We  
4 have letters; that's not enough. I think that the  
5 executives need to meet with the customers.

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

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

22 And thank you so much for your time.

23 CHMN. PIERCE: Sure. And we have had meetings  
24 in those areas that will house a lot of people. And I  
25 know in Tucson we would want to do it up in the

1 northwest, not at our Commission room. I don't think  
2 that room will be big enough either. So we will do that  
3 where we can accommodate the public and do it in an  
4 hour -- at an hour that is convenient for the public.  
5 So that will be our plan. And we will, we will schedule  
6 that.

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

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

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

24           CHMN. PIERCE: Okay. We are back in order. We  
25 have got a quorum.

1 Our order of speaking is we are going to go back  
2 around with Commissioner Newman. He is not in the room  
3 yet.

4 Commissioner Stump, do you have anything?

5 COM. STUMP: Sure.

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

8 COM. STUMP: Well, I will not --

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

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

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

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

21 MR. CLARK: Mr. Moody.

22 COM. STUMP: -- or most anyone.

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

25 Communication, I think Commissioner Kennedy put

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

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

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

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

24 COM. STUMP: Sure.

25 MR. MOODY: And it gets back into the power in

1 the gathering areas and the gas plants, which they don't  
2 have control over. That's another constituent that I  
3 assume is going to work and they have to deal with on a  
4 daily basis.

5 COM. STUMP: Thanks.

6 Were you interested in addressing that,  
7 Mr. Cleary?

8 MR. CLEARY: Yes, Commissioner.

9 COM. STUMP: Thanks.

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

18 COM. STUMP: Great. Thanks.

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

21 COM. NEWMAN: Thank you, Mr. Chairman.

22 One issue I would like to raise that I would  
23 like to get everyone's take on this, is compensation for  
24 potential damages. Just, I want to hear what all the  
25 parties have to say about it.

1           There is going to be a rate case coming up on  
2 Southwest Gas. This might be included in that  
3 discussion. But for purposes of today I just wanted to  
4 hear the parties' initial, initial positions on some of  
5 the consumer requests that we have had for compensation,  
6 missed days of work, things like that. I know it might  
7 add up to a lot of money, but I want to initially hear  
8 from the folks.

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

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

14           What the company has been doing as we receive  
15 claims, we have been reviewing those claims from  
16 consistency with our tariff as well as the Commission  
17 regulations, you know, given the weather event and the  
18 force majeure associated with that. As we review those  
19 claims, if they are weather event force majeure related,  
20 we would not be paying those claims. If there are  
21 incidents where, as we review these, where we believe  
22 maybe it is something that Southwest Gas did outside of  
23 that weather related event, the company would then, you  
24 know, review that in terms of whether compensation would  
25 be justified or not.



1 COM. NEWMAN: And for purposes of the record, we  
2 are making a record now, would you -- not everyone on  
3 the Commission is an attorney; I am the only one. What  
4 does force majeure mean?

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

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

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

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

24 MR. BROWN: Sure. The claims, the last check  
25 that I, the update that I have received earlier in the

1 week was I think we had received around low 40s. 44 is  
2 a number that I remember in terms of claims that we have  
3 been submitted. Obviously they come in from different  
4 sources. So as those are gathered and collected, you  
5 know, there may be some that the company has received,  
6 they just hadn't made it to the person that is keeping  
7 track of those claims. But according to that person, I  
8 think we were at 44.

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

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

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

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

23 COM. NEWMAN: Okay. And I think in the Tucson  
24 service area there are probably businesses as well along  
25 Skyline and those areas that might have been affected.

1 I am not sure. I am not sure of the extent of the  
2 boundaries in the Foothills where the outage occurred.

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

9 MR. BROWN: Sure.

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

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

1 COM. NEWMAN: Okay. Thank you.

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

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

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

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

1 there any FERC jurisdiction over this?

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

7 CHMN. PIERCE: Okay.

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

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

24 I realize from a shareholder standpoint you  
25 don't want fines and you are holding fast to your force

1 majeure defense. But just given your experience and  
2 your wealth of education, is there?

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

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

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

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

25 Electric doesn't have to visit your home. So

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

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

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

24 MR. BOWE: For Arizona Natural Gas, Chairman, we  
25 would agree that had the Eloy facility been fully

1 operational with the capability we have designed into  
2 the facility, we could have provided an awful lot of  
3 precious support in the heart of the market. Whether it  
4 would have eliminated all potential problems I am not  
5 qualified to say. I speak out of turn all the time,  
6 but I am not a hydraulic, pipeline hydraulic engineer,  
7 but it would have provided a substantial quantity of  
8 gas, well in excess of the shortfall that Mr. Cleary  
9 mentioned he experienced on the basically input side of  
10 his system right here in the market area.

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

20 I guess perhaps El Paso had a little bit more  
21 trouble in Permian than Transwestern did. But in both  
22 cases there was less gas coming in than was being pulled  
23 out. That's what market area storage allows you to  
24 compensate for. So had we been here, I think we would  
25 have had a different outcome.



1 CHMN. PIERCE: Well, and I think it would have  
2 been a dramatic difference. And I think it would have  
3 beyond -- and I think natural gas storage will take us  
4 well beyond. And we can expand natural gas storage in  
5 that area, can we not, to how much more than the initial  
6 phase that you are talking about?

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

14 CHMN. PIERCE: The economy of scale.

15 MR. BOWE: That's right.

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

23 CHMN. PIERCE: Okay.

24 MR. BOWE: In the initial design I think, if I  
25 am not mistaken -- I will look to the back of the

1 room -- three bcf of capacity, four, and we could go  
2 beyond that, although it takes time. The reality is  
3 that the leaching process isn't instantaneous. But you  
4 could bring storage into the market and then allow the  
5 storage to grow as the market's need for the additional  
6 insurance grows over time.

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

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

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

1 gas fired power generation. And we only see that  
2 inCreasing over time.

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

16 CHMN. PIERCE: Thank you.

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

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

24 I think it is really great. It sounds like -- I  
25 did not know where my fellow, all my fellow

1 Commissioners were on this issue, but it looks like you  
2 certainly have got a Commission here who is all very  
3 favorable towards natural gas storage and well aware of  
4 the El Paso project that didn't make it over by Luke Air  
5 Force Base.

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

18 Just two other things.

19 One is I just wanted to make a comment. As  
20 Southwest Gas looks at how you can better communicate, I  
21 know you said one of the first things you did was you  
22 reached out to your customers. And, yet, there were  
23 some specific customers, because there are a lot of  
24 customers, who didn't feel reached out to at all. And I  
25 know you talked about the reverse 911 that you have in

1 the Tucson area that you didn't have the availability  
2 for in Sierra Vista. You may have other clients or  
3 customers that live in areas without the reverse 911.  
4 So we will be looking forward to hearing how you would  
5 remedy that.

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

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

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

17 CHMN. PIERCE: Mr. Olea.

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

21 I know that I sat in on all the meetings with  
22 you. But one of the things that did catch my attention  
23 in the meeting with El Paso was their storage that they  
24 have and the fact that they had used all they could as  
25 far as the capacity on the output of that storage. And

1 it was about 250. And I am not good with the, with  
2 the -- okay, I think it was 250 million decatherms,  
3 something like that.

4 MR. CLEARY: That's correct.

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

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

1 already exists in New Mexico, would that have helped the  
2 situation in Arizona?

3 CHMN. PIERCE: At the Washington facility?

4 MR. OLEA: Yes.

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

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

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

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

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

25 MR. BOWE: Mr. Chairman, may I respond for

1 Arizona Natural Gas Storage?

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

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

21 A market area salt cavern storage facility can  
22 essentially be opened up full throttle and provide a  
23 whole lot of deliverability almost instantly. So that  
24 is a difference. No question that having additional  
25 deliverability as Washington Ranch would have been



1 helpful. Having the amount of deliverability you could  
2 get out of a gas storage facility right at the heart of  
3 the market would have been more helpful still.

4 CHMN. PIERCE: We just have to weigh wheeling.  
5 Commissioner Burns has a follow-up.

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

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

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

15 MR. SHELLEY: We are.

16 CHMN. PIERCE: Southwest Gas.

17 COM. BURNS: Southwest Gas.

18 MS. BRANDT: Salt River Project.

19 CHMN. PIERCE: SRP, APS.

20 MR. MOODY: UNS.

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

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

25 MR. GRAY: And AEPCO.

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

5 Commissioner Kennedy.

6 COM. KENNEDY: Thank you, Mr. Chairman.  
7 Mr. Olea actually asked my question.

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

9 All right. We will go back to Commissioner  
10 Newman.

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

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

20 In fact, I don't even believe all the players  
21 are necessarily sitting at this table. In fact I know  
22 they are not. There are some other potential suppliers  
23 in competition to produce storage in Arizona who are not  
24 represented here. They are in the audience but they are  
25 not ready to present today.

1           So I would just like to say that I think,  
2 Mr. Chairman and my colleagues, I think that this does  
3 merit a workshop with stakeholders, that we work over a  
4 period of time on this issue.

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

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

23           MR. CLARK: I would be glad to. Chairman Pierce  
24 and Commissioner Newman, the reverse 911 system that we  
25 utilized within Pima County was a one time opportunity

1 for us in that area to put out a message to customers  
2 somewhat related to the outage area. We had lost 14,600  
3 customers, and the calls went out based on the  
4 boundaries that had to be defined to about 18,000  
5 customers. So some of them received a message that  
6 actually were not out of natural gas service.

7 We looked at --

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

10 MR. CLARK: It very well could have been.

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

21 Now, the predictive dialing system that we are  
22 looking into as a company, if that's a viable resource  
23 and the company decides to utilize that system in our  
24 call centers, would not be an emergency type system. We  
25 could utilize it for many purposes hopefully throughout

1 our entire service territory as it was required. And  
2 the message length would not be restricted. And,  
3 therefore, we could give updates over that system to  
4 customers. We could obviously give primary information  
5 to them. All of those things would more than likely be  
6 available through this new technology we are looking  
7 into.

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

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

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

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

20 COM. NEWMAN: One other question, Chairman, and  
21 this involves cost of storage. We have one of the  
22 companies at the table. And I know that your plan looks  
23 to store, have -- store aboveground, which might  
24 mitigate some potential water table problems in your  
25 design, and that there is other designs out there, which

1 is one of the reasons why I want to have a, you know,  
2 workshop, so we understand the different designs as we  
3 go forward, but mas o menos again, projection of the  
4 cost, if you will, of your plan, which I believe  
5 mitigates some of the potential environmental water  
6 issues that were raised in the last couple of years.

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

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

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

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

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

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

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

20 COM. NEWMAN: Who would pay?

21 MR. BOWE: We would expect the customers who  
22 make long-term commitments to take service from the  
23 project to pay. There would be a reservation charge  
24 that would reserve the right to a particular quantity of  
25 capacity. There would be a variable charge that would

1 be assessed on injections and withdrawals. And the  
2 customers would pay the costs of the project.

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

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

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

24 MR. BOWE: For the commitments for capacity,  
25 yes, we would expect the customers to make the

1 commitments and make the pledge economically viable.

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

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

16 CHMN. PIERCE: We are going to move.

17 Commissioner Stump.

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

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

24 MR. PASTOR: We have looked at that as far as  
25 work force development. I don't have the numbers off



1 the top, or at my fingertips here. But at peak force we  
2 are probably talking about 400 construction staff or  
3 more.

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

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

12 COM. STUMP: Yeah. Thanks.

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

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

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

24 I want to go to price stability, what happens to  
25 price stability, and Southwest Gas can answer this,

1 others could, by having natural gas storage, what that  
2 does when all of a sudden we see we are short, or maybe,  
3 because it is a guessing game each day, and we buy here  
4 and at the end of the day we have got -- we need to sell  
5 some. And when we need to sell some, bad things happen  
6 to price. It is amazing, but I just bought it, I just  
7 drove it off the lot and for some reason that natural  
8 gas is not worth as much. So what does storage do to  
9 price stability?

10 MR. MOODY: Well, certainly for Southwest Gas,  
11 if we had storage, the top of the list is daily  
12 balancing. But one of the side notes of daily balancing  
13 on the system is that, for example, if you can take away  
14 the customer outage portion of this and just assume  
15 everybody got their service, we paid as much as 10 or  
16 \$11 a decatherm for gas that we purchased late cycle,  
17 that if we had storage we would have --

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

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

22 Late cycle means the cheapest gas I am going to  
23 buy the day before the day I burn it. And then as time  
24 moves on, I have different kinds of gas deals that I  
25 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 The second place is that, with storage, we can  
11 line up gas deals that are more ratable. They don't  
12 have peaking capabilities added to them. And so on a  
13 day when we don't need to burn the gas, we might run it  
14 in storage. And that means we can levelize our gas  
15 purchases.

16 And I don't want to lead you to believe that in  
17 the modern gas markets that can rationalize storage,  
18 because the gas prices the day before the event were \$4,  
19 the day of the event may have been as high as 10, the  
20 day after they were 4. So we don't have these prolonged  
21 periods of time of volatility maybe we were having in  
22 2007 or 2006 where gas might move 2 or \$3 over a period  
23 of a couple months.

24 CHMN. PIERCE: But it is certainly a side  
25 benefit.

1 MR. MOODY: Oh, absolutely. It would be  
2 considered in each study we would bring to the  
3 Commission.

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

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

10 CHMN. PIERCE: Okay.

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

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

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

18 CHMN. PIERCE: Very good. Thank you.

19 Commissioner Burns.

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

23 MR. PASTOR: That's correct.

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

25 MR. PASTOR: Those are facility operators and

1 maintenance staff at the site as well as some  
2 environmental specialists that would do some monitoring  
3 activities as well.

4 MR. BOWE: Generally skilled jobs.

5 CHMN. PIERCE: Thank you.

6 Commissioner Kennedy.

7 COM. KENNEDY: Mr. Chairman.

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

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

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

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

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

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

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

1 have some more.

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

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

8 MS. MCCAFFREY: Deirdre McCaffrey from NGS  
9 Energy.

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

19 CHMN. PIERCE: Stay there for a moment.

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

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

24 COM. NEWMAN: Yeah. It is my understanding that  
25 Pinal County supports the double tracking and station --

1 you know, there is a railroad project in the same  
2 general vicinity. As some of you may know, they support  
3 the switching station in the same general vicinity, in  
4 the Newman or Picacho Basin, however you want to call  
5 it. And I have talked to Mr. Rios, who is supportive of  
6 creating more jobs in Pinal County and is generally  
7 supportive.

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

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

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

25 I want to go back to communication on Cochise

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

16 What do you think of that proposal?

17 MR. CLARK: Well, Commissioner Newman, that  
18 certainly is something that we can look into. I  
19 understand there are two options in this arena. One,  
20 there are vendors who have this type of system, that you  
21 subscribe to their system and then they keep the phone  
22 lists, they maintain the system, they do everything  
23 else, and then you just pay a fee to use it. Then you  
24 can purchase outright the system, have that technology  
25 in house. So we will look at all of those aspects and



1 make the proper decision which is best for the  
2 ratepayers or shareholders, the company, all involved.

3 COM. NEWMAN: Okay. Thank you so much.

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

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

22 Can you speak to that?

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

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

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

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

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

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

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

7 CHMN. PIERCE: Go ahead. Yes, please.

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

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

23 So I think you would still, you would still want  
24 gas storage even if you did get some long-term  
25 contracts.

1 COM. NEWMAN: You want both strategies in place  
2 to get the best deal for the consumer.

3 MR. GRAY: Certainly, yes.

4 COM. NEWMAN: Okay.

5 CHMN. PIERCE: All right.

6 COM. NEWMAN: That's it for now.

7 CHMN. PIERCE: Commissioner Kennedy.

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

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

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

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

23 MR. CLARK: Well, Commissioner Kennedy, let me  
24 start off by saying that I am a Tucson resident. I have  
25 lived in Tucson now over five years. That is where I

1 live. That is where I serve. And that is my home and  
2 where I will continue to be. So I am an Arizonan.

3 COM. KENNEDY: Okay. So my fault.

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

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

16 MR. CLARK: Well, Commissioner Kennedy,  
17 Southwest Gas has already had one initial meeting with  
18 El Paso in which we have talked and discussed the issue  
19 at hand. We are looking at sharing information. We are  
20 looking at modeling our systems on both sides, on the  
21 transmission side from their part, on the distribution  
22 system on Southwest Gas' part, so that we can really get  
23 our arms around what opportunities in the future we  
24 might have to work together and ensure that, if there is  
25 infrastructure that needs to be installed, that we take

1 a good hard look at that, or whatever we can do on a  
2 cooperative basis to work together in that arena.

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

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

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

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

19 Now, we recognize that there are challenges,  
20 that our world has changed even in the past year, and  
21 that some of the social media that is prevalent today,  
22 we are a little behind the times. But we are willing to  
23 admit that and now try to catch up. And that's the  
24 commitment that we have, is that we need to take a good,  
25 hard look at the communications, the way it happened

1 during this event and what we can do in the future to  
2 better talk to the customer.

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

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

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

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

20 MR. CLARK: Mr. Shaw.

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

22 MR. CLARK: Yes.

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

1 loudly and clearly.

2 MR. CLARK: We hear you, Commissioner Kennedy.  
3 And we will shoulder that responsibility.

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

12 CHMN. PIERCE: Okay. Finished? Thank you.

13 And I just want to say that where systems need  
14 to change for the company isn't necessarily in Tucson  
15 and southern Arizona. And that's why you are here. You  
16 have a statewide system and you involve other states.  
17 And so really whether someone is at fault directly for  
18 what happened in Tucson, that's one thing, but the  
19 overall fault in this lies with the system isn't what we  
20 wanted. And somewhere along the line somebody is going  
21 to be responsible for making sure that it changes.

22 And, you know, Mr. Shaw is here, and he is at  
23 the top of that. I am sure he is going to make sure  
24 that somebody is going to be the person responsible.  
25 And for us, I think whoever that is and who is going to



1 be leading those changes, we ought to know who is going  
2 to be assigned that so maybe we can get updated as that  
3 process is going along. We know who our, we know our  
4 local folks really well, but they are not the ones that  
5 are going to be check tasked with this. And we would  
6 kind of like to know who that is.

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

14 CHMN. PIERCE: All right. Then, then you are  
15 going to take it on for the whole company to make --  
16 because whatever system you develop ought to be one in  
17 which the company is going to use, or somewhere. I mean  
18 that's -- this is an issue in southern Arizona today.  
19 It could be an issue in Southwest's service territory  
20 somewhere else tomorrow. So we just want to make sure  
21 that we have that consistency and we know who is  
22 resolving that for the company. And if it is going to  
23 be you, that's fine, because if it gets resolved in  
24 southern Arizona satisfactorily, that ought to be maybe  
25 a company standard.

1 MR. CLARK: Okay. From the respect of  
2 infrastructure, that will be my responsibility. For  
3 technology, I will have to look to some of my staff  
4 co-workers to assist in those decision processes and in  
5 that arena. So I will be responsible for the  
6 infrastructure, ensuring that pipelines and facilities  
7 are in place. And then we will look at the technology  
8 side more than likely out of our staff groups in Las  
9 Vegas.

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

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

23 MR. OLEA: Mr. Chairman.

24 CHMN. PIERCE: Yes.

25 MR. OLEA: Steve Olea.

1 CHMN. PIERCE: Okay, Mr. Olea.

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

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

17 And the reason I say that is because of what  
18 happened in Texas. And in our talks with the, you know,  
19 with the companies we found out that in Texas, when the  
20 electric companies did their curtailment plans that were  
21 approved by ERCOT, that the gas facilities were not part  
22 of the critical structure that was to be left on. And  
23 at the time that made total sense, because I am sure  
24 that in Texas, the way we do here, they do mock  
25 exercises, but when they tested in Texas they probably

1 tested the electric companies in the summer. And when  
2 you do that in the summer, the gas companies are not  
3 critical in the summer. But I don't think anybody  
4 thought of the electric companies losing power in the  
5 middle of winter that would at the same time turn off  
6 the gas companies.

7           So I think maybe somehow that, as the state  
8 emergency services does, do their development of mock  
9 exercises for different things that could happen.  
10 Perhaps in some kind of cooperation with the Commission  
11 and with the different utilities, you know, all of us  
12 could come up with a mock exercise that would do  
13 something like this that would incorporate the reverse  
14 911 or, you know, some kind of radio emergency messages  
15 or something.

16           Because I know a lot of the calls that we were  
17 getting from customers was I can't find out what is  
18 happening or like where do I go because I don't have  
19 heat, and so like is there a school, you know. So it is  
20 that type of thing that I think the emergency services,  
21 state emergency services could coordinate with the  
22 different county emergency services on what happens when  
23 this happens. As you said, if this were to be a power  
24 outage in the middle of August that lasted for four  
25 days, you know, what is going to happen? You have to

1 have a place to put people. And somebody at the state  
2 level has to be in charge of that. But I don't think  
3 that, or at least we haven't thought of and I know that  
4 emergency services hasn't thought of, okay, what happens  
5 if you have a major gas outage together with a power  
6 outage in the winter, well, what happens if you have the  
7 same thing in the summer. That's something that I  
8 think, you know, that could -- that that would bring  
9 into effect what you had been talking about and also  
10 what Commissioner Kennedy had mentioned.

11 CHMN. PIERCE: Okay. Commissioner Newman.

12 COM. NEWMAN: This is my last question.

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

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

21 Mock exercises are a good idea. Blacktop  
22 exercises is another way of describing them in the  
23 emergency services field. So I certainly agree with  
24 Staff that, and with the Commissioner, with the Chairman  
25 by his question of summer/winter analysis, that we

1 should have blacktop exercises, summer problems, winter  
2 problems, the nexus between the electric grid and gas  
3 providers. And I think I will be asking for that.

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

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

23 With regard to consumer complaints, Steve and  
24 Staff, I was going to ask you a number of questions.  
25 But I have -- have we gotten back to all the folks that

1 have reached Mr. Martinez in our Tucson office who took  
2 the bulk of the calls for southern Arizona? Has there  
3 been a written response to them? And if we do a meeting  
4 in southern Arizona, I would hope that the people who  
5 contacted Mr. Martinez and others in our consumer  
6 complaints division would be noticed of the potential  
7 meetings in southern Arizona it looks like we will try  
8 to coordinate with the Southwest Gas rate hearing.

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

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

25 COM. NEWMAN: Okay. But given the fact that we

1 will have more hearings, I am sort of making a, you  
2 know, soft request that these folks be particularly  
3 noticed because they got through to us. And we haven't  
4 ignored them, I know. Staff does a good job. But I  
5 just want them to understand that we will have southern  
6 Arizona hearings, if they have other information for us,  
7 you know, that they are invited to come to provide.

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

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

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

22 And then the one other point that I will  
23 conclude with is this. We, Arizona spends \$2.5 billion  
24 in importing natural gas from out of state. As you  
25 know, we don't have natural gas. That's \$1.7 billion in



1 one pot and another approximately .8 billion in another  
2 pot. That's a mas o menos number that I came to around  
3 a year ago. I am not sure exactly what it is today, and  
4 it is mercurial in some ways, but approximately \$2.5  
5 billion. That is an awful lot of money that our  
6 ratepayers are paying for a resource that we don't have.

7 And I am a bit on the soapbox on this, but  
8 natural gas is much cleaner than coal. We have a  
9 preference for natural gas. However, it is very costly.  
10 Right now it is down. Volatility could get even higher.

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

23 But, so we are sort of -- we need your gas to  
24 help us have a good energy system and a clean energy  
25 system and reliable energy system. So we are just

1 hoping that when I mention that number and how big a  
2 number that is, you know, perhaps it could get less if  
3 we did more renewables and, but, and that's something  
4 that I want to look forward to working with the gas  
5 companies in the future.

6 But this is no small matter. We pay  
7 \$2.5 billion, which is a big chunk. And we would like  
8 to see the system work better. I am not going to go  
9 chastise anyone here; although, there are lots of  
10 customers who probably, if they were here, you know,  
11 would chastise you. But that's just part of our job.  
12 So we will have to put on our flack jackets when we meet  
13 with them. But I think that the customers deserve the  
14 benefit of all that money that they are paying for the  
15 natural gas and indirectly supporting or directly  
16 supporting, you know, your management, your employees,  
17 and your shareholders.

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

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

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

23 MR. MOODY: There is no doubt that over the past  
24 ten years, if you average the cost of gas, the commodity  
25 is much more expensive than the infrastructure. But we

1 are not typically meeting to discuss the last failure.  
2 We are talking about rates. And every decision that we  
3 make balances the services we provide against what our  
4 ratepayers pay. We would like to think of that in terms  
5 of stockholders because they are deemed greedy, but the  
6 reality is every rate paid a ratepayer somewhere pays  
7 it. And we do that prudently. And that is the  
8 interaction between our commissions.

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

13 CHMN. PIERCE: Okay. I was going to ask a  
14 question of El Paso, and then we are going to wrap up.

15 The map you have given, and I noticed it many,  
16 many times, but the San Juan Basin sort of meanders  
17 around Four Corners and picks up a little bit of  
18 Arizona. Is that an artist using, you know, just, you  
19 know --

20 MR. CLEARY: PowerPoint art?

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

23 MR. CLEARY: Let me ask.

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

1 state.

2 CHMN. PIERCE: Well, there you have it.

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

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

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

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

19 And I have had a little discussion with my  
20 staff. It is probably not likely we would do this in  
21 conjunction with the rate case since that's really going  
22 to be ready to go for us next fall. And I don't  
23 think -- this coming fall. And that's not going to  
24 work. So we are going to try and organize something in  
25 a very short amount of time. We are going to check with

1 people's calendars between now and the end of the month,  
2 if not that, the first part of April, to try to make  
3 sure that we get out to discuss this issue. But I would  
4 like to make sure in that amount of time the company is  
5 prepared and has the information we have from our  
6 rate -- your customers, our constituents and so that you  
7 are prepared for that.

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

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

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

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

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

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

1 possible. And so that's what we would like to do.

2 So, again, thank you all for your participation.  
3 I know many of you have come a long way at great expense  
4 to make sure that you were a part of this. And it was  
5 very informative. And I hope you agree, too.

6 If someone has a parting comment, I would give  
7 you maybe ten seconds, but I think we have exhausted it.  
8 Anyone else?

9 (No response.)

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

12 (The proceeding concluded at 3:00 p.m.)

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1 STATE OF ARIZONA )  
2 COUNTY OF MARICOPA ) ss.

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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