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G-00000C-11-0081

OPEN MEETING

03/02/2011

1 BEFORE THE ARIZONA CORPORATION COMMISSION 2 3 IN THE MATTER OF THE COMMISSION'S DOCKET NO. GATHERING OF INFORMATION CONCERNING) G-00000C-11-0081 NATURAL GAS OUTAGES IN THE SOUTHWESTERN UNITED STATES. 5 OPEN MEETING 6 7 8 9 At: Phoenix, Arizona 10 March 2, 2011 Date: 11 Filed: March 16, 2011 12 13 14 REPORTER'S TRANSCRIPT OF PROCEEDINGS 15 AGENDA ITEM NO. U-21 16 17 18 19 20 ARIZONA REPORTING SERVICE, INC. Court Reporting 21 Suite 502 2200 North Central Avenue 22 Phoenix, Arizona 85004-1481 23 COLETTE E. ROSS By: Prepared for: Certified Reporter 24 Certificate No. 50658 25 ARIZONA CORPORATION COMMISSION

G-00000C-11-0081

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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.					
7						
8 9 10 11	BEFORE: GARY PIERCE, Chairman BOB STUMP, Commissioner SANDRA D. KENNEDY, Commissioner PAUL NEWMAN, Commissioner BRENDA BURNS, Commissioner					
12 13	APPEARANCES:					
14	For El Paso Natural Gas Company:					
15	Mr. Jim Cleary					
161718	For Transwestern Pipeline Company: Ms. Shelley Corman					
19	For UNS Gas:					
20 21	Mr. Michael Patten Mr. Nathan Shelley					
22	For Southwest Gas Corporation:					
23 24	Mr. Justin Lee Brown Mr. Bill Moody Mr. Gary Clark					
25	Mr. Gary Clark					

1	APPEARANCES:				
2					
3	For	NGS	Energy:		
4		Mr.	Jeffrey Crockett James F. Bowe, Jr.		
5			Daniel E. Pastor Deirdre J. McCaffr	еу	
6					
7	For	the	Arizona Corporation	Commission Staff:	
		Mr.	Steve Olea		
8		Mr.	Bob Gray		
9					
10				COLETTE E. ROSS	
11				Certified Reporter Certificate No. 50658	
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- 1 CHMN. PIERCE: We will now organize for Item
- No. 21. 2
- 3 Today we are here to talk about the incident
- 4 that occurred in southern Arizona with the outage of
- natural gas and where that began and how it ended. And 5
- 6 we are going from -- here basically is what we are going
- to do and what I have done. Here is how we are going to 7
- organize this so everyone knows. We are going to take 8
- 9 in this order, and I want -- we are not going to have
- Commissioner questions. It tends to work well for us. 10
- 11 I invite you -- we are going to take them eventually --
- 12 to write down your questions and let us go through a
- five to ten-minute presentation from each of the 13
- 14 companies we are going to call on, go to public comment
- 15 too, so that we have a perspective up here of where
- everything is. And then I think we can ask the 16
- 17 questions that I think will be most useful.
- I would invite -- and I see that Jeff Shaw is 18
- here, who is the CEO of Southwest Gas, and a number of 19
- 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.
- What we are going to do, we will have someone, 23
- whoever you designate from your company, or there may be 24
- more than one, when we get to questions I am sure you 25

- are going to delegate that question to whoever can best 1
- 2 answer. We invite you to do that. And some of you are
- 3 going to have PowerPoint presentations, and we welcome
- that. But we would, to start out, like to take five or
- ten minutes, and it will go in this order: El Paso 5
- 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
- presentations. So you don't have to take a lot of time 12
- 13 here to start but something that you, in an opening
- statement, you would like to say, we would invite you to 14
- do that. 15
- 16 So let's begin with El Paso Natural Gas.
- 17 MR. CLEARY: Thank you, Chairman Pierce. My
- name is Jim Cleary. I am president of El Paso Natural 18
- 19 Gas Company. And we would like to give an overview of
- our view of what happened on the cold weather incident 20
- 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

- 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
- of El Paso Natural, we are a large interstate natural 10
- 11 gas provider, transporter. We effectively move gas from
- supply basins like the Anadarko Basin, San Juan, 12
- 13 Permian. We take gas into our system from pipeline
- interconnects which might bring gas to El Paso Natural 14
- 15 from the Rockies and we deliver to markets across the
- southwestern U.S. and Mexico. In Arizona we have nearly 16
- 17 5,000 miles of pipeline. We have 345 separate delivery
- meters. And we have 175 employees who are proud to call 18
- 19 this state their home.
- 20 I am going to just talk for a minute. Let me
- just talk from the slides. 21
- 22 CHMN. PIERCE: Well, we can probably help with
- that, can't we, to make sure those move. Why don't we 23
- 24 do that.
- 25 MR. GRAY: Yes, absolutely.

- 8
- 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
- audience, especially those who might be commenters. 4
- 5 they can see that. So as long as you, you can see the
- screen, everyone, we should be okay. But we need to be 6
- 7 able to move that screen to click into the next slide
- 8 anyway. Thank you.
- MR. CLEARY: Slide 3, please. 9
- This slide shows in sort of an overview sketch 10
- of the role of interstate pipelines in the gas delivery 11
- 12 system. Gas is produced by independent producers. Gas
- 13 is then -- typically in the Permian Basin and San Juan,
- it goes to processing plants to remove various 14
- substances from the gas to make it ready for pipeline 15
- 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
- purchased by our customers. Our customers will tell us 20
- where the gas should enter into our system, which could 21
- be the San Juan Basin, the Permian Basin, wherever, and 22
- 23 where they want the gas delivered each day.
- The key from operating the pipeline is the gas 24
- supply in each day should equal the gas supply out 25

- 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:
- The Permian Basin in west Texas, to the north of 5
- 6 that would be the Anadarko Basin that we also access
- 7 through our El Paso Natural system. The San Juan Basin
- in northern Mexico is a major supply area. And we bring 8
- in gas from the Rockies through various interconnects, 9
- interconnects with our Colorado interstate gas system in 10
- the east, with our Mohave system in the west, and with 11
- 12 other independent pipelines coming out of basically
- north of San Juan. 13
- So what did we see on the cold weather event? 14
- 15 Clearly this is a weather driven event, record cold
- temperatures. We had record cold temperatures in 16
- 17 Tucson, record cold temperatures in Albuquerque, 45 year
- record cold temperatures in El Paso, Texas. And that 18
- did several things. It increased the demand for natural 19
- gas due to the temperature. And we saw loss of gas 20
- 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
- ERCOT reported 82 plants went down due to cold weather, 2
- 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
- this event was on February 1st, 2nd and 3rd, 12
- significantly more gas was taken out of the system by El 13
- 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
- in our pipeline declined on the main line, some of our 18
- 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
- that is outlined, over that two-day period demand 25

- 7 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
- Juan production at different pipeline interconnects. 8
- 9 This was gas that might have come in from the Rockies or
- other regions. And they were able to do so, but we 10
- 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,
- 1st, 2nd and 3rd that ran flawlessly. We were on full 22
- withdrawal and the asset worked just great. 23
- 24 The next line is the impact on our line pack.
- 25 Now, we have line -- gas in our pipeline that's kept

- under pressure. And that was depleted. That was 1
- 2 depleted by about 700,000 a day on February 1st and 2nd,
- 700,000 over a three-day period. And when that 3
- 4 happened, we saw lower pressures on our main line
- 5 because there was no, not enough supply coming in to
- replenish that pressure. And as we have lower pressures 6
- 7 on our main line, that's when our customers, Southwest
- Gas, for example, had trouble making deliveries to their 8
- 9 distribution customers.
- 10 Briefly during the period we were -- our
- 11 response immediately was we had fully manned our
- critical compressor stations. So we had people, our 12
- technicians, there in case of any weather issues related 13
- to those stations. We were in constant contact with our 14
- 15 customers. I mentioned Washington Ranch was on full
- withdrawal. Our line pack, we held it as long as we 16
- 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
- those days and more, 15 to 20 percent more each day. 20
- 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.
- I think one key takeaway is to see better integration 24
- 25 between the electric sector, for example, for the

- electric utilities and generators to include natural gas 1
- 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,
- illustrates the need to have an end-to-end mock. That 9
- would be a mock scenario involving producers, processing 10
- plant operators, pipelines and distribution and utility 11
- 12 customers. And there are ways to do that. We belong to
- 13 an industry group called the Western Energy Institute.
- SRP is a member. Southwest Gas is a member. And I 14
- 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
- we are going to look at all 314 meters that we have in 20
- 21 this state and make sure everything operated as it is
- designed, as is expected, and does it integrate well in 22
- 23 an optimal way with our customers.
- 24 Finally, I think it is time to reevaluate
- storage. We have proposed in 2008 to expand our 25

- Washington Ranch storage field by 100 million a day.
- The 250 that we have now helped. 350 a day would have 2
- 3 helped more. We had proposed and actually my company
- has spent, invested \$40 million between 2004 and 2008 to 4
- 5 develop storage fields in Arizona. Now, and these would
- be high volume salt cavern fields. Had either Copper 6
- 7 Eagle or Arizona gas storage been in place, it would
- 8 have been a huge benefit in dealing with this situation.
- 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.
- Now, you may ask why didn't those projects go 12
- forward after an investment of \$40 million. These are 13
- 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
- there when we worked on this in 2004, '5, '6 and '7. 18
- 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
- storage and doing what we can to move it forward, and 23
- 24 certainly looking forward to working with our customers
- and this Commission on that. 2.5

- 1 CHMN. PIERCE: Well, thank you. And I think it
- 2 is ironic that the senator who was here was the former
- representative who really put the dagger in Copper 3
- 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
- I was there for that discussion. So were you, 8
- 9 Representative Stump, former Representative Stump.
- 10 Okay. Transwestern.
- 11 MS. CORMAN: Good morning, Chairman Pierce,
- Commissioners. I am Shelley Corman. I am the senior 12
- vice president of commercial and regulatory affairs for 13
- Transwestern. And I just have a couple of slides to 14
- 15 share with you this morning.
- First is a picture of the Transwestern system. 16
- 17 I don't think it shows up too good overhead. Oh, wait.
- I have some copies here for you. 18
- 19 The Transwestern system carries gas supplies
- from primarily the San Juan and the Permian Basins to 20
- 2.1 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
- Texas, the Keystone storage facility. 24
- 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.
- But we did think it was helpful to show you a 12
- picture of what was going on in our system. And really 13
- 14 I will echo many of the same themes of Mr. Cleary.
- During the recent winter weather we did experience 15
- 16 impacts on the Transwestern system. We didn't lose
- 17 power at any of our compressor stations. We had
- capacity to serve our customers. And we continued to 18
- 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,
- this is a graph form of the same sort of thing. 23
- 24 you are looking at on this graph is the legend.
- left-hand side is plotting in MMBtu the receipts and the 25

- 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
- our main line in New Mexico. 4
- 5 And you can see that for a period of time during
- the gas day of February 2nd, nearly 400,000 more MMBtus 6
- 7 were going out of the system than were coming into the
- Transwestern system. As a percent of Transwestern's 8
- line pack on a good day, we have four bcf of gas in the 9
- 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
- system than was coming in for a large part of the day on 13
- 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
- supply was split between the San Juan and the Permian 17
- Basins. There were some anecdotal information that that 18
- 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
- had good pressure on the system. We never fell below 25

- 7 800 pounds. But certainly our lower pressures on the
- main line were affected and impacted some of our other 2
- 3 customers.
- 4 So in sum, really I will echo the comments of
- 5 Mr. Cleary. For us it was primarily an impact at
- managing to serve our customers out of line pack during 6
- 7 the winter weather of February 1st through the 5th.
- 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 Now we will hear from UNS Gas.
- 17 MR. PATTEN: Good morning, Chairman Pierce,
- Commissioners. Michael Patten on behalf of UNS Gas. 18
- 19 As you know, UNS Gas serves portions of northern
- Arizona as well as the Nogales area. UNS Gas did not 20
- 21 experience any retail customer outages or curtailments
- as a result of that cold weather event a few weeks ago. 22
- 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.
- 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.
- 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,

- Commissioner Kennedy, as well as Commissioner Burns has 1
- 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
- president. They will be providing an overview from a 6
- 7 gas supply as well as the operations perspective on the
- 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.
- MR. MOODY: There we go. Good morning, 13
- 14 Chairman, Commissioners. I am Bill Moody, vice
- 15 president of gas supply.
- We are the utility of record. We had the 16
- 17 customers out. So we brought both the supply and
- operations side. We will keep a brief presentation here 18
- 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

- fact, we all do, from the Commission through all of our
- companies, our suppliers, do a lot of planning around
- trying not to lose service. And we also do significant 3
- planning investment about service restoration. And we 4
- 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
- gas is angry. And that's the end of that story. You 8
- 9 can't make him happy because you already took the
- service away. In this case, there is a lot of evidence. 10
- We feel like we reacted well to what we knew beforehand 11
- and afterwards, and we were a victim of this weather 12
- event just like our customers are. That doesn't dismiss 13
- 14 their feelings on the matter because, when we put our
- 15 corporate logo out, we understand we are providing a
- service. 16
- I think the causes of the outages are pretty 17
- well established. And I am going to give some detail 18
- that some of you have seen in separate meetings about to 19
- put perspective around our Arizona weather event. This 20
- slide simply mimics what our pipeline suppliers have 21
- told us about the supply basins. And we experienced 22
- every single problem that they described. 23
- 24 Bentek is a research firm that does national and
- international gas research. And they sent a market 25

- 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
- basins where we purchased our gas for our Arizona 6
- 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
- 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
- is different. So --14
- 15 MR. MOODY: We have been morphing. We have some
- more copies if you need one. 16
- 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
- report was done very quickly afterwards -- but at least 24
- 25 50 power plants offline. And Texas experienced this

- peak gas burn higher than any time in their history. 7
- the meantime, out here in Arizona and across New Mexico
- we are having one in 60 year weather, which is beyond 3
- any of our design parameters. 4
- 5 To put that in perspective, the green bar is the
- one in 30 year weather event. I have been working at
- Southwest Gas for 30 years and I can tell you that that 7
- 8 bar kept getting warmer for my entire career until this
- 9 vear.
- 10 The blue bar is the actual weather if you went
- to the weather service and looked. Then when we order 11
- gas every day for you, our customers, we have a very 12
- 13 sophisticated modeling system that takes into account
- humidity and wind, all the things that might affect how 14
- 15 cold a customer feels or how a dwelling may react to gas
- so we know how much to order. 16
- And that red bar really puts in perspective this 17
- weather event. Those of you who are in Tucson, and my 18
- compatriot, Gary Clark here, runs that division, when I 19
- talked to him that day it was cold and it was windy, but 20
- 21 the words were you can't believe the wind. And that
- proves it out. In Tucson, Arizona, we had 42 degree day 22
- 23 effective weather compared to a design or a 30 year
- event of 35 and a half. That's a lot colder, not just 24
- 25 that little tiny red bar. And notice that Phoenix,

- Arizona is at a peak as well. I had the opportunity to
- 2 visit Phoenix. I never felt it this cold on that day
- when I was here. I lived here for awhile. 3
- 4 So the gas company reacts in the way that we
- 5 can. Our gas buyers on February 1st, we see that the
- green bar is the gas we actually took. The blue bar is 6
- 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 qas 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
- bar it includes all firm purchases. And in some cases 19
- 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
- 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
- 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
- the other, but, so we are always dealing with that. But 10
- 11 as I told most of you separately, you are paying us for
- judgment. And we exercised our best judgment. We also 12
- 13 have 24-hour monitoring of our system. Distribution and
- 14 the inlet pressures that are at topic here this morning,
- 1.5 we understood what was going on there.
- 16 And then we also receive routine pipeline
- communications. By tariff, part of the agreement is, if 17
- 18 we have a problem or, more importantly in this case, if
- 19 the pipeline is experiencing, there are a number of ways
- we would learn the condition of our line. One is each 20
- 21 of the people involved in purchasing gas every day have
- on their screen the ability to look at the line pack in 22
- 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
- warnings. In this case the SOC stands for a strained 2
- condition, which means the pipeline anticipates they may 3
- have a problem, and they signal customers. And we try 4
- 5 to take action. And then it turns into a critical
- operating condition emergency, which is the worst 6
- 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
- 1.0 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 quess that
- 14 people may go off.
- 15 So now I am going to hand this over to Gary
- Clark, who is your vice president of operations for 1.6
- 17 Tucson, to talk a little bit about what happened in the
- operating division. 18
- 19 MR. CLARK: Good morning, Mr. Chairman and
- Commissioners. 20
- 21 Southwest Gas does indeed have an emergency plan
- 22 manual and a winter operations quide that we follow on a
- regular basis during the cold weather portions of our 23
- year. We attend the winter operations meetings that the 24
- Commission sets up around the October time frame. And 25

- we take those meetings very seriously. And we look at 1
- our operations. We look at all aspects of our pipeline 2
- 3 systems to try and ensure that we will have adequate
- capacities to serve our customers. 4
- 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
- systems on the pipeline and we were anticipating that 8
- there could be potential problems if there wasn't some 9
- 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
- 1.6 voluntarily who had alternate services went from natural
- gas to an alternate energy source. And at Fort 17
- Huachuca, the base cooperated with us and put out an 1.8
- order that all thermostats would be lowered to 19
- approximately 50 degrees during this cold weather event 20
- 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
- us to see what would happen as our pressures and the 24
- demand on our system, if the degradation occurred that 25

- we thought in this weather event would occur.
- 2 And lastly, we implemented, per our winter
- operations plan, the process of having our field 3
- personnel out at critical facilities starting at 10:00 4
- 5 p.m. that night throughout the night to monitor and make
- sure there were no mechanical issues that would occur as
- a result of the cold weather. 7
- In the morning of February 3rd then, we received 8
- our first alarm on our telemetry system in the night in
- the Sierra Vista area. And we recognized that in that 10
- 11 area that pressures were dropping at a significant rate
- and that if it continued during the morning peak that 12
- 13 there would be outages.
- 14 Similarly, in the Tucson area, on the Houghton
- Road system, this was the system that we were 15
- particularly concerned with, it services approximately 16
- 17 150,000 customers, and what you see in this graph is
- ultimately as a result of this event, the areas in blue 18
- 19 are the customers that we ultimately lost as a result of
- not having enough capacity in our distribution system to 20
- serve them. 21
- 22 Immediately following the outage, we began the
- restoration of service to our customers. We notified 23
- 24 the gas safety group of the Arizona Corporation
- Commission and let them know of both the Sierra Vista 25

- event and the Tucson event and subsequently kept them 1
- informed as well as other members of the Commission of 2
- 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
- service to our customers. 8
- 9 That restoration event began immediately upon
- 10 the outages. We began by having to go and turn off
- meters to customers. And ultimately the restoration 1.1
- 12 efforts, once they began, our first service restoration
- attempt was completed at all customers that were lost 13
- 14 within two and a half days.
- 15 During this time period, we were very busy in
- communicating with various media resources to keep them 16
- 17 alerted to what was going on during our outage. We
- immediately released news releases and ultimately 18
- initiated and responded to 376 media contacts. As a 19
- result of that, we communicated both in Tucson and 20
- Sierra Vista. 21
- 22 Now, it might be of interest that in Sierra
- 23 Vista they have no television media within that
- community. And, therefore, in Tucson, we were providing 24
- information to Sierra Vista, to the Tucson media. But 25

- 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
- stations in the area to keep them apprised of what was 4
- 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
- 1.0 public service agencies down there to keep them
- 11 informed.
- As a result of all of these efforts, we feel 12
- 13 that, from a field perspective, everything went as we
- had hoped. Service was restored as quickly as possible. 14
- 15 However, several recommendations have come out of this
- process. And briefly let me go over those 16
- 17 recommendations.
- 18 We feel that we need to develop a system to
- capture field information regarding relight locations 19
- and estimated times. This would give our customers 20
- up-to-date information as per when service technicians 21
- 22 would be knocking on their door. That was the single
- biggest concern that our customers had, when will you be 23
- at our house. And we feel that we will investigate and 24
- try to implement a system that will enable us to do 25

- 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
- opportunity to put out a message to all customers within 7
- the outage affected areas. A predictive dialing system 8
- 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.
- We recognize that this today is an important opportunity 13
- 14 for us to pursue and to see what opportunities are
- 15 there, again, to communicate with customers.
- We want to look at software which will update in 16
- 17 an emergency, technology on our website so that that
- information is current and accurate and ongoing. 18
- 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
- departments, so they are available on an on-call basis 22
- 23 to assist operations with technological needs and other
- 24 areas.
- 25 Right now we have discovered that in our

- 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
- systems to talk to each other. 4
- 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
- maintenance of a critical system or anything else at the 9
- 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
- one debriefing session with our pipeline provider, El 13
- 14 Paso, and have been in contact with our suppliers.
- Trust me when I say there is a big mess of bookkeeping 15
- 16 on the back end of this. Every gas customer who was
- purchasing gas or selling gas into a pipeline was 17
- hitting their scheduling system. And we will be working 18
- 19 through that for a long time to find out all the facts.
- 20 But, more importantly, I wanted to make sure that you
- understood that it doesn't stop after this happens. 21
- 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
- February in 60 years, we will put it back into our 25

- 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
- infrastructure improvements. And that's probably the 4
- 5 most important one. In a moment I will comment on
- storage. But also understand that we are in constant 6
- 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
- don't just do for winter preparedness. In my department 12
- 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.
- Now, I realize we are switching away a little bit from 16
- 17 our customer communications and our gas purchasing. But
- this was a question on everybody's mind. It has been 18
- 19 kicked around in Arizona for a long time.
- 20 As utilities we responded by forming the Arizona
- Storage Coalition in 2007. And as kind of the storage 21
- 22 activity maybe lost a tiny bit of momentum, we are still
- all working on it. Commission Staff was involved. We 23
- keep them apprised. And generally this occurs following 24
- 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
- to Southwest Gas with questions after we hear -- let's 13
- 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
- appearing today for NGS Energy. 18
- 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
- project located near Eloy. 22.
- 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

- 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
- system reliability and would have certainly benefited 11
- 12 the state in this outage that we have just been through.
- 13 I would ask the parties and the Commissioners to
- consider the question if not now, when is the time for 14
- 15 underground natural gas storage.
- 16 We believe that the circumstances exist today
- 17 that are -- there will not be more favorable
- circumstances than exists today to get a project like 18
- 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
- PowerPoint presentation. 24
- 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
- the development of other projects around the country, 15
- 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
- natural gas storage. I think most people have the idea 24
- 25 how it works, but essentially it is cavern storage in

- salt, so in a salt body that has suitable properties.
- 2 There is the dissolving of a salt cavity for storage,
- which is then taken off of the interstate pipeline 3
- system, placed in the storage cavern and then drawn off 4
- whenever it is needed. It is done in a very safe 5
- manner. And it is widely used around the country. 6
- 7 There are about 400 natural gas storage facilities that
- store gas underground in the U.S., but none in Arizona.
- 9 So just briefly, why is it needed? I think we
- have talked about why the need is here. It is its 10
- 11 reliability, flexibility and security. Storage can
- provide both supply and pressure to the systems to meet 12
- peak demand. And it also serves an important role in 13
- providing gas fired generation backup to renewables. So
- as additional renewables come on line, there is a need
- for gas storage and gas fired backup. And it also helps 16
- with the operation of the pipeline systems to make that 17
- 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
- the state is dependent upon pipeline service for its 22
- 23 natural gas.
- So specific to the Arizona Natural Gas Storage 2.4
- project, we have talked about the Picacho Peak Basin 25

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- near Eloy. That's where the project is located, about
- midway between Phoenix and Tucson.
- And the facility itself, I wanted to give just a 3
- 4 quick overview of what the components are. There will
- be eight storage caverns that provide a total capacity
- of 20 bcf. And that provides for up to one bcf per day 6
- 7 of withdrawal capacity. Those caverns are shown here on
- 8 the facility map with the green dots. And it may be
- difficult to see but there is a little brown halo around 9
- 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
- there are pipeline systems that connect this facility to 23
- the pipeline infrastructure. 24
- 25 And specifically they will -- the project

- includes a nine and a half mile dual 24-inch pipeline
- header that runs up and would tie into the Transwestern 2
- 3 and El Paso pipeline systems with pipeline laterals out
- 4 to two power plants.
- So just briefly, a question that we get all the 5
- time is how are these salt caverns created. And the way 6
- 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
- salt bed, dissolves the salt just like you would 10
- dissolve table salt in a cup of water, saturates the 11
- 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
- evaporation ponds. Well, there is really only one other 16
- 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
- that water to be disposed of. We have also looked at a 22
- 23 potential zone above the salt, but there are concerns
- about disposal into that interval because it directly 24
- 25 underlies the regional aquifer system and it runs the

- 1 risk of potential salt water intrusion into the aquifer
- system, which we can't have. And that would definitely 2
- 3 be something that would be a concern to Arizona
- Department of Environmental Quality.
- 5 There is also an issue from a structural
- standpoint about injecting water above the salt in that 6
- 7 it runs a risk of potentially damaging the cap rock
- 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
- evaporation pond options. 12
- 13 So the construction and operation of an
- underground natural gas storage facility is highly 14
- 15 regulated both at the federal level as well as the state
- 16 level.
- 17 The overarching agency for permitting of the
- facility would be the Federal Energy Regulatory 18
- 19 Commission, which takes the lead authority on that. The
- ANGS project is in the prefiling process with FERC. We 20
- have been in prefiling for a little bit over a year at 21
- 22 this point.
- 23 The other lead agency that gets involved at a
- federal level is the US EPA. They provide permits for 24
- the solution mining steps, so the injection of the water 25

- 42
- 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
- Department of Environmental Quality has an aquifer 8
- 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.
- 1.3 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
- of water resources for a dam safety protocol to make 16
- sure that we can construct those embankments safely and 17
- 18 have a permit to do so.
- 19 We are also regulated by the Arizona Oil and Gas
- 2.0 Conservation Commission as well as Pinal County Air
- 21 Ouality Control District.
- 22 A few other folks that are involved as well --
- it is a long list of folks, and that's why permitting 23
- one of these projects takes quite awhile -- is the 24
- Arizona State Land Department is involved. There are 25

- some properties there that the site would, the facility 1
- 2 would be located on. And then, of course, we go through
- endangered species and the potential for any kind of 3
- 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
- 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,
- Mr. Chairman, Commissioners. Jim Bowe of Dewey & 12
- LeBoeuf for Arizona Natural Gas Storage. And I want to 13
- thank you for the opportunity to speak with you about 14
- market area storage in general and the Arizona Natural 15
- Gas Storage project in particular. 16
- 17 I think the reason my client asked me to appear
- here is storage has sort of been my life, which is a 18
- 19 depressed, sad commentary. For the last 15 years I have
- 20 been involved in nearly 40 gas storage projects all over
- the United States and elsewhere in the world, including 21
- 22 all the projects that Dan described as having been
- undertaken by Natural Gas Storage, by NGS Energy. 23
- First let's talk definitional terms. Market 2.4
- 25 area storage, which is what I am going to be touting for

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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

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

23

sizing.

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- deliveries without having the benefits of gas storage.
- 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
- peak hour, particularly in extraordinary weather events
- or in the event of infrastructure upsets, which can come 8
- 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
- sort of excursion that this area had to deal with 13
- resulting from cold weather could just as easily result 14
- 15 from the loss of a number of sources of supply into the
- market during the summer which could lead to a loss of a 16
- great deal of power generation. And the consequences 17
- would be pretty significant for the state. 18
- 19 The availability of pipeline capacity into the
- state that allows the state to meet its peak day and 20
- peak hour needs has really caused the utilities to defer 21
- committing to gas storage. And that's why we have been 22
- 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
- conference convened by the Federal Energy Regulatory 25

- 1 Commission to explore the need for gas storage in
- Arizona shortly after FERC denied an application by Red 2
- 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 What does it allow the gas infrastructure to do?
- 11 Over the short term and the near term, market area
- storage can support service on the peak day. It 12
- provides physical insurance against disruptions of 13
- 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
- happened in the Permian Basin, well freeze-offs, things 17
- of that nature. It can also compensate for sudden 18
- spikes in demand, gas fired generation suddenly being 19
- 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

- 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
- systems, of the local distribution systems connected to 8
- 9 them, and of the regional energy infrastructure,
- including gas fired power plants as a whole. Over the 10
- 11 longer longer term, having market area storage would
- allow more efficient sizing and operation of the 12
- 13 long-haul transmission systems.
- 14 So, overall, having the availability of market
- 15 area storage would improve the overall reliability and
- security of the energy infrastructure in the state. So 16
- over all periods, having market area storage in place 17
- would offer a physical hedge to gas LDCs and power 18
- qenerators and to other major consumers of natural qas. 19
- 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
- hour for an additional source of supply. And it also 25

- allows you to reduce your exposure to being long gas and
- having to dispose of it when there is an opportunity to 2
- store the gas rather than sell it at fire sale prices. 3
- 4 So there can be real gas cost benefits as well,
- but here I want to focus more on reliability and 5
- security as one of the major virtues of having market 6
- 7 area storage. And this is not new. This is something
- that has been recognized in a lot of other markets, as I 8
- mentioned, California, Michigan, the northeastern 9
- states, and most recently Alaska. 10
- I am working on a gas storage project in Alaska. 11
- 12 It would be the first one in Alaska being developed in
- 13 recognition of declining deliverability into the
- Anchorage and Kenai Peninsula area. The Alaska, or 14
- Regulatory Commission of Alaska had to wrestle with some 15
- of the same issues you have to wrestle with having never 16
- 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
- a long time. I went back and looked at comments that 23
- were filed with this Commission in 2003 by El Paso 24
- 25 Natural Gas and, at that time, Copper Eagle Gas Storage.

- 1 The same essential points were made in the presentations
- that El Paso filed with this Commission and made today. 2
- 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
- withdrawals, and that would allow for more efficient and 6
- 7 cost effective and reliable satisfaction of market
- needs. 8
- 9 I wanted to see if we can go to one slide just
- 10 to give you a sense of what graphically having storage
- close to the market can mean. Obviously having storage 11
- 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
- personal experience with. This is a salt cavern gas 16
- 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
- excursions down, or the major withdrawals from the 22
- 23 storage facility, for three days this storage facility,
- which had emergency backup power generation, was on line 24
- 25 and able to supply half a billion cubic feet a day to

- the Florida market in place of offshore platforms that 1.
- 2 had been shut in and processing facilities that had been
- 3 shut in. The pipeline that was supplying Florida,
- Florida Gas Transmission, actually wrote a thank you
- letter to my client for having actually been there and 5
- 6 having kept the system up.
- 7 Half a billion cubic feet would be what this
- project could do, as it is currently designed, to inject 8
- 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
- market which is supplied in part by Canadian gas. 18
- Having storage close to the market was the difference 19
- 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
- market area storage can really make a difference and 23
- 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

- provide. They need to be confident that they won't be 1
- second guessing making the long-term commitment to gas 2
- storage. They need to be confident that they will be 3
- 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
- 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
- that Arizona has enjoyed on the pipeline systems is 11
- essentially over. It just should not be acceptable to 12
- go forward planning on continuing to depend entirely on 13
- growing pipeline supplies given the consequence of 14
- having those supplies not be available. Market area 15
- 16 storage can hedge against that.
- 17 The LDCs and power generators need to be
- encouraged to plan for the future. They need to be told 18
- that if they do so and they prudently commit to capacity 19
- in a market area storage project, they won't be second 20
- quessed having made that commitment. They need to be 21
- able to recover their costs. 22
- With the contractual commitments that we have 23
- 24 been discussing with the Arizona Storage Coalition for
- 25 more than a year, in hand with this Commission's support

- and with the continued cooperation of El Paso Natural 1
- 2 Gas, which has been very cooperative with this project
- 3 in the past, the Arizona Natural Gas Storage project can
- result and in about three years can provide the kind of
- insurance that this state really requires for its gas 5
- 6 delivery infrastructure.
- 7 So we are prepared to go. We are well advanced
- 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.
- Okay. What we are going to do is we are going 13
- 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
- like you to be able to come up and make your public 19
- 20 comment, and any other members of the general public
- that are here. And then we will take a break. 21
- 22 MR. POZEFSKY: Thank you, Mr. Chairman. Daniel
- 23 Pozefsky -- by the way, good morning, Commissioners,
- Mr. Chairman. Daniel Pozefsky on behalf of RUCO. I 24
- have got some very short comments. I shouldn't hold you 25

- up too long on the break.
- 2 We have been also informed from the various
- folks who have been talking, some of them about what has 3
- 4 been going, so we have been following it, too. And, of
- 5 course, we are very concerned, especially about the
- outage. In fact, we were really surprised at how 6
- 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
- was equipped for it, we wouldn't even be having this 10
- discussion. 11
- 12 But it does raise the issue. And, you know, it
- brings to mind that certain things probably should be 13
- 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
- comment. And I heard it alluded to in the El Paso 17
- presentation. And that is that we think at least, at 18
- the very least, at this point that the Texas PUC should 19
- 20 put national gas plants on the critical infrastructure
- 21 list so, when there are rolling blackouts or there are
- rolling brownouts, our utilities don't get power cuts, 22
- 23 because when plants go down, it affects the interstate
- 2.4 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
- break. But at the same time, when we come back, because
- 7 there will be questions, and we can get into some deeper
- presentations, although I think people pretty much made 8
- them, but what I would like you to do, if we could, is 9
- 10 make sure we have everybody who made presentations,
- let's get close to a mike, use the tables that are here, 11
- 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
- then, if there is more to go, we will take a lunch break 15
- and we will come back. Okay? 16
- 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
- hold it to this. We have an order on the board as far 22
- 23 as how everybody has weighed in. And what I would like
- to do, instead of having any of us go too long, what I 24
- 25 would prefer is each of us as Commissioners maybe take

- five minutes, then pass it on to the next one. Then I
- will just come right back in that order, if that works 2
- for everybody, until we are done. We will get to 3
- everybody's questions but I would like to give everybody
- a chance to take a breather and let someone ask a 5
- 6 question. Will that work? All right.
- 7 Here is the order: Commissioner Newman,
- 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
- start with --11
- 12 COM. STUMP: Like Jeopardy.
- CHMN. PIERCE: I don't know if someone wants to 13
- 14 continue a presentation. That is not my agenda that
- 15 way, but I really felt like you abused my ten minutes,
- some did not, and that you have said quite a bit. So 16
- let's -- and I know we have, we have Commission Staff 17
- 18 here.
- Thank you, everyone, for being here. 19
- 20 So if there is a question for Staff or if Staff,
- if they hear something and they need to make the record 21
- clear for us, if you would please join in. 22
- 23 Commissioner Newman.
- COM. NEWMAN: Thank you so much, Mr. Chairman. 24
- 25 Good afternoon -- good morning -- good afternoon

- to everyone. I appreciate this briefing. Thank you, 1
- 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
- player. So I got my finger on the button. 6
- 7 The first thing I would like to say is that all
- of these presentations show that the energy system in 8
- 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
- plants going down in the midwest, the power conditions 12
- in the midwest were something that I know that all the 13
- regulators in the country are very concerned about. 14
- 15 I just came back from a meeting in Washington
- where this was a subject. Although we didn't have 16
- 17 extensive conversations about, about what happened here,
- there were extensive conversations, as you know, about 18
- San Bruno and other issues, other safety issues on the 19
- 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.
- And as some of you may know, I represent 24
- 25 southern Arizona, or at least I am from southern

- Arizona. I represent the whole state but I am the one 1
- 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
- to individuals that were affected. And it is a serious 6
- 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
- question I have, there seems to be a discrepancy. I 10
- believe the representative from Southwest Gas, I forget 11
- 12 who it was, could have been Mr. Clark, could have been
- Mr. Moody, but there seems to be a discrepancy about 13
- whether or not everything, all power was turned back on 14
- 15 between -- in two and a half days. I thought I heard a
- statement that said that it was two and a half days. 16
- 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
- conditions. And I have not -- my gas didn't go out 20
- because I don't live in the Foothills. I live in 21
- 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

- days? Which is the true statement? 1
- 2 MR. CLARK: Okay. Mr. Chairman and Commissioner
- Newman, my name again is Gary Clark. And let me try to 3
- 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
- complete, then we begin our relights. That's where our 13
- service people go to each home, knock on the door and 14
- restore service to our customers. 15
- 16 What we are seeing, Commissioner, is within that
- 17 two and a half day window, both in Sierra Vista and
- Tucson, that we had made our first attempt to knock on 18
- every door and restore service to customers. It is our 19
- 20 policy that after that first attempt we begin
- 21 immediately thereafter and make a second pass and knock
- on every door that customers weren't home the first 22
- 23 time, and then we make a third pass. If a customer
- hasn't been home for all three of those knocks on the 24
- door, then we leave a door tag. We give a specific 25

- number for that customer to call and our call center is 1
- 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
- customer's home to restore service. 6
- 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
- required to call in. And it could have been we had 11
- 12 customers that were gone for the weekend perhaps on
- vacation during this event and, when they got home, they 13
- 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
- the Sierra Vista and Tucson areas as to -- or did you 18
- have time or manpower to do a sort of an analysis of how 19
- 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,
- or can you provide the Commission with that material at 22.
- 23 another time?
- 24 MR. CLARK: That will have to be, Commissioner
- 25 Newman, that will have to be provided at an additional,

- at an additional time. I don't have that data right in
- 2 front of me, but we can get it, yes.
- COM. NEWMAN: That wasn't one of my original 3
- questions that I put to you, but it just -- I want to, I
- want to understand this discrepancy and to have a
- content analysis of -- it is not that many folks. It 6
- 7 could be done, I know. So I am asking for that.
- 8 MR. CLARK: Okav.
- 9 COM. BURNS: On the second issue, with regard to
- 10 storage -- where is my storage gentlemen? Right
- there -- there is a long history of debate about 11
- 12 storage. I haven't been here for all of it. I have
- only been on the Commission for two years. But, 13
- 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 --
- their lobbyist at the time was Mr. Ober from Policy 19
- 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
- potential of putting storage in the same general area of 25

- the Picacho Basin. And I was rather surprised by this 1
- 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
- Basin -- it is not really the Picacho Basin; it is, the 6
- 7 peak there happens to be Newman Peak, believe it or
- 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
- imagine it is into the millions of dollars, and they 12
- said they couldn't figure out a way to get gas storage 13
- 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,
- Commissioner --21
- 22 CHMN. PIERCE: Just go ahead and slide it over.
- 23 It will move.
- MR. CLEARY: Let me take a stab at that. 2.4
- 25 I, Commissioner Newman, was not in that meeting

- 7 at that time; although, I was president of El Paso
- 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
- 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
- was the tenor of the comment, that we couldn't figure 11
- out a way to do a traditional storage field where you 12
- 13 take the solution mining and inject it deep. That led
- us to explore. And I believe NGS has this view that the 14
- 15 correct thing to do is to, when you remove the brine
- 16 water from the solution mining, to put it in evaporation
- ponds. And so I think that's the way we saw it. And I 17
- will let NGS comment as to whether they see it the same 18
- 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
- lot of questions. 4
- 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: Okav.
- 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.
- It is done, it has been done by use of surface 14
- 15 evaporation ponds both in this country and in Europe
- 16 successfully.
- 17 I expect that this month FERC will certificate
- another salt cavern gas storage project to be developed 18
- 19 in Utah called the Magnum Gas Storage project. It
- relies upon surface evaporation ponds. 20
- 21 While in the best of all worlds you would
- 22 dispose of your brine underground, the use of surface
- evaporation ponds for a variety of different purposes is 23
- 24 well understood. There are a lot of them around Arizona
- and elsewhere in the west. 25

1 COM. NEWMAN: Okay. I quess, Mr. Chairman, you 2 would like to move on now? 3 CHMN. PTERCE: Yeah. Then we will come back. 4 Commissioner Stump. 5 COM. STUMP: Thanks, Mr. Chairman. I have argued for years that we need natural gas 6 7 storage in Arizona. And perhaps in the face of crisis, the opportunity arises to move forward in this regard. 8 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, what we as Commissioners can do, as you see it, to help 14 15 make this happen. 16 MR. MOODY: I can certainly give you the utility point of view of that. Of course, the first and most 17 important thing that occurred was this Commission 18 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 2.2 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

- as customers. And I am going to be loosely speaking for 1
- 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
- separate offerings. The various storage providers' 8
- representatives in this rooms, some who have spoken, 9
- some who have not, made presentation. We looked at LNG. 10
- 11 We looked at aboveground compressed storage, kind of
- everything that was available out there. And naturally, 12
- 13 when there is no reliability issue, cost is a problem.
- And what we tried to do was, A, you want to pick a 14
- 15 storage project that you believe can be completed as
- stated, and, B, is a good economic deal for your 16
- 17 customers. And that would lead us to come to the
- Commission with preapproval. So we believe that on the 18
- 19 Commission's side as cohorts in this that we already
- have that structure in place in order to present a 20
- 21 reasonable project.
- 22 The Arizona Storage Coalition works diligently,
- 2.3 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
- is simple to make sure that we get something we really 3
- 4 like.
- And then, finally, the developers, I believe --5
- 6 now, a lot of this data is anecdotal so you don't want
- to take any of it to the bank, but everybody who is in
- 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.
- So there is a large constituency outside of 12
- 13 this, am I going to be able to see the salt, is salt
- poisonous, is it making my groundwater bad. And that's 14
- 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,
- now for seven years. And we have been talking about 18
- 19 storage for six years of it. So it is a difficult nut
- to crack, and everyone you have heard from in this room 20
- 2.1 you have spoken to in both of those arenas.
- 22 Is that adequate?
- 2.3 COM. STUMP: Yes. I appreciate that.
- 24 sounds as though the takeaway from today, too,
- Mr. Chairman, Mr. Moody, is that one does see a greater 25

- alignment of stakeholders and potential markets based on 1
- 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
- that could have been worse? 10
- 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.
- MR. CLEARY: Mr. Chairman, Commissioner Stump, I 14
- think it is a matter of degree. The shortfall we faced 15
- 16 on February 2nd and 3rd was about 600,000 and change of
- 17 decatherms. When I talked about our line pack being
- depleted, it really took over a two-day period 700,000 18
- 19 decatherms of line pack diminution, that is without
- being restored, to provide to hit low pressures, which 20
- 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

- seen probably a day quicker or maybe a day and a half
- quicker. And they would have been more severe. You 2
- 3 know, we could model it if you are really interested in
- it but that's my quick accounting look at the answer. 4
- 5 COM. STUMP: Mr. Chairman, Mr. Cleary, had there
- been natural gas storage in Arizona at the time -- I 6
- 7 recall you were one of the speakers -- it was unclear as
- 8 to how that might have mitigated in the specific
- 9 circumstance.
- MR. CLEARY: I think --10
- CHMN. PIERCE: I would keep going in order. 11
- 12 MR. CLEARY: -- the exact impact of storage
- perhaps is not -- we haven't done the modeling. But, 13
- 14 again, to look at the rough numbers, the storage
- projects that I had on my chart in the market area were 15
- 16 between 400,000 and 900,000 and change of
- deliverability. 17
- 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,
- probably would have averted the problems. We would have 24
- 25 to model it to give you a precise answer, but if you say

- the premise is ins and outs have to equal on the 1
- 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
- who -- and there is frustration amongst those who would 8
- 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
- interpretation and the understandings of these policies 12
- are in question. And I read things and I think, gosh, I 13
- 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
- customer notification system in place in advance that 24
- 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
- to, and this is for Southwest Gas, just as, and I have 4
- used this example before, just as when there is maybe a 5
- four-alarm fire and every neighboring fire department
- comes, it is all hands on deck, couldn't there be an 7
- agreement between Southwest Gas, UNS Gas, and other gas 8
- 9 providers that have personnel that, in an event like
- 10 this where we are going to have several days of people
- without natural gas, is there a way to speed that 11
- process up, and when we take -- to put all those assets 12
- 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
- know, you know, when am I going to get turned back on? 17
- The primary question, they want to know when am I going 18
- to get turned back on. 19
- 20 And the second one is is the company doing
- 21 everything in their power. Now, the company feels like
- they did everything in their power. But I think in the 22
- 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

in the past done. And that is typically in an outage in

the past, we would turn every meter off. Then we would

24

25

- 1 purge the entire system. And then we would begin the
- 2 relight process. And in so doing, we could predict a
- little closer than in this particular case. 3
- 4 What we did here in an expediency of time was to
- 5 have meters turned off in one area, the purging process
- begin as we were still turning off meters in another 6
- area. And then relights began in that first area while 7
- 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
- other states and in central Arizona join our work force 14
- 15 to handle this outage. We felt that that was an
- efficient number of trained personnel to handle the 16
- 17 situation that we encountered efficiently and
- effectively. However, we do have agreements in place 18
- 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
- at what we did in house with our own personnel, how we 22
- 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

- back on in this situation. So we will take a good, hard
- look at that, Mr. Chairman, and see what is that fine
- line balance that we need between safety, efficiency and 3
- 4 restoring that service to our customers.
- CHMN. PIERCE: Thank you. 5
- 6 Commissioner Burns.
- 7 COM. BURNS: Thank you, Mr. Chairman. I quess
- 8 three main points.
- The first is that I know we don't have the 9
- people who are affected. The customers are not here 1.0
- today. It was a long drive. They won't be able to 11
- come. I don't know if there will be a future hearing of 12
- 13 this kind or not.
- 1.4 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
- perhaps on doing something like that. And if they were 20
- here, you know, then we would actually be hearing from 21
- the people who experienced it. 22.
- And when I heard that, I called a couple people 23
- 24 I knew in the Sierra Vista area because I wanted to know
- what they were experiencing. And when I listened, I 25

- don't remember if it was Mr. Clark or Mr. Moody said, 1
- 2 you know, you already have got an unhappy customer
- because they don't have their service that they want --3
- 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
- they just wanted to know more, they wanted more 6
- 7 information. A lot of them who were -- you know, they
- are reasonable people. They understand things happen. 8
- 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
- e-mail from Supervisor Call, Pat Call. He was very 13
- helpful in Sierra Vista. And he was somehow trying to 14
- 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
- our elderly and hospitals will be taken care of more 18
- 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
- 2.2. because your system needs to be updated, there were
- 23 elderly people that you don't have on your list as being
- elderly so they weren't there. And there just were a 24
- 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
- want to update it. And I understand there are some 3
- difficulties in doing that. But I would like to know 4
- how you would go about updating your list and then 5
- utilizing that list.
- 7 MR. CLARK: Okay. Thank you, Mr. Chairman and
- Commissioner Burns. We have learned a lot about the 8
- 9 PURPA process as we have gone through this outage. May
- 10 I let you know what takes place currently as far as
- PURPA customers. 11
- When a customer signs up for service at 12
- 13 Southwest Gas, either that primary applicant or a
- co-applicant, we ask them for their birth date. That's 14
- 15 a voluntarily asked question. If they provide us that
- 16 birth date, then it is entered into the system. The
- system then queries both of the primary applicant and 17
- the co-applicant on a monthly basis. And if either one 18
- of those reach the age of 62, which is the elderly 19
- classification for the PURPA act, then it is coded 20
- automatically in our system as a PURPA customer. 21
- One of the things that we ran into in the outage 22
- is many customers of record had elderly parents living 23
- with them. For example, they aren't the customer of 24
- record in our billing system and they -- we have no way 25

- of tracking and knowing that that situation was in the
- 2 home
- 3 When a customer calls in to request service, our
- customer reps are trained to ask is there any elderly, 4
- 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
- priority in restoring their service and getting their 12
- 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.
- But if the people know the reason you are asking, you 18
- 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.
- 24 know, when you read the e-mails, space heaters sold out
- very quickly. There were contacts with SSVEC, their 25

- 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
- all those things going on there teach us all about the 4
- 5 things that need to be addressed, just like space
- heaters being sold out. 6
- 7 I just wanted to jump and ask -- oh, one other
- 8 question before I move to that one. I probably am out
- of my five minutes. One of the things I heard, the
- e-mail was that Southwest Gas employees should have been 10
- 11 working around the clock, not just daylight hours. Can
- 12 you respond to that?
- 13 MR. CLARK: Yes. Mr. Chairman and Commissioner
- Burns, we have found historically that we work as many 14
- 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.
- So in order to facilitate that plus give our 20
- people a little bit of rest, we would work from 7:00 21
- 22 a.m. to 11:00 p.m. at night and we continued that
- process clear through the weekend. Our call center was 23
- opened extended hours on Friday. We had a minor glitch 24
- with our e-mail system and we kept our call center folks 25

- in the office answering the phones until, again, 11:00
- p.m. when those calls diminished and we felt we could 2
- 3 allow them to go home.
- Working around the clock is certainly something 4
- 5 that can be pursued. But we have found, from our
- perspective, that when you knock on somebody's door 6
- after 11:00 p.m., they just are unwilling to respond. 7
- And then our efficiency drops off dramatically after
- that time period. 9
- 10 COM. BURNS: I think my time is up.
- 11 CHMN. PIERCE: Thank vou.
- 12 Commissioner Kennedy.
- 13 COM. KENNEDY: Thank you, Mr. Chairman.
- 14 First let me say I think I have learned more
- about line packs and decatherms, more than I wanted to. 15
- And let me thank all the stakeholders and all parties 16
- 1.7 for coming today, and especially El Paso Natural Gas and
- their response to my letter. I thought it was very 18
- 19 informative. It was well -- it was thorough.
- 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
- losses to businesses. And I am concerned about that. 23
- While emotions run high, jumping to conclusions 24
- before the facts are known is not, was not helpful. I 25

- believe being here today we are gathering the facts. 1
- 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
- providers around the United States so they don't fall 10
- 11 into the same shoes as we did here today.
- 12 Again, I don't have any questions. But I just
- really thank you, Mr. Chairman. I think Commissioner 13
- 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.
- And most of them are working people who couldn't travel 17
- 18 here today. And I am hoping that you and maybe Staff
- can put together some time, I think we owe it to the 19
- people in southern Arizona, to go down and hear them 20
- 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
- that Southwest Gas has filed. And I think in the coming 25

- 1 weeks we can actually, in conjunction with that, where
- we would normally go out and take public comment on 2
- 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
- be discussion down the road and they see it from this, 9
- 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
- those meetings, we need to have, with the exception of 13
- 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
- meeting from Commissioners. And I think this meeting 18
- will give the public a lot more information, detailed 19
- 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,
- certainly let us know how that impacted them but, at the 23
- 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.
- COM. KENNEDY: If you don't mind, Mr. Chairman, 4
- 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
- secret here that I am a huge supporter of natural gas 9
- 10 storage. We have been talking about it, I think now,
- for three, four years. But I think it would increase 11
- 12 the reliability of supply to Arizona natural gas
- customers. And I think Mr. Crockett took the words 13
- 14 right out of my mouth: If not today, then when. And I
- think Commission Staff and stakeholders have been 15
- 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.
- COM. NEWMAN: Yes. To the point that 21
- 22 Commissioner Burns and Commissioner Kennedy made, and I
- 23 was going to make on my next point if I had another
- minute to do it, it is now -- I will make it a majority 24
- 25 of the Commission right now. I am truly asking the

- 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
- have letters; that's not enough. I think that the 4
- 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
- as I know that folks would like to talk to us about
- this, there is also that issue of compensation hanging 10
- 11 out. I know there is force majeure clauses in El Paso
- pipeline contracts. But I think they also want that 12
- 13 question answered. And they would like us to look them
- in the eye, and executives, look them in the eye on that 14
- 15 question.
- 16 So with that, I make it official. I ask for
- 17 hearings down in Cochise County, either in Buena Vista
- High School in Sierra Vista or Cochise County Board of 18
- Supervisors, which has a bigger room than this. And I 19
- am sure the Pima County board will help us find a 20
- 21 suitable place to have a meeting in Pima County.
- 22 And thank you so much for your time.
- CHMN. PIERCE: Sure. And we have had meetings 23
- in those areas that will house a lot of people. And I 24
- 25 know in Tucson we would want to do it up in the

- 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
- hour -- at an hour that is convenient for the public. 4
- 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
- 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,
- published so that the public has a chance to read that 12
- 13 and have it available at the meeting so that they have
- 14 that, because, otherwise, we just go back, we start
- repeating things that, if they had it in their hand, 15
- they -- frankly, if I am speaking and if there is 16
- 17 something I could have read and known so I could have
- honed in my question, as a member of the public, I would 18
- 19 want to be able to hone in my comments and questions to
- the things that are still unknown to me. 20
- So we will be back at, let's be back at 12:35 --21
- 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
- around with Commissioner Newman. He is not in the room 2
- 3 yet.
- 4 Commissioner Stump, do you have anything?
- 5 COM. STUMP: Sure.
- CHMN. PIERCE: Okay. Let you begin, and you are 6
- 7 on the clock for five, approximately.
- COM. STUMP: Well, I will not --8
- 9 CHMN. PIERCE: I just wanted to let you know how
- Congress does it. 10
- 11 COM. STUMP: Wow. Thank you, Senator. Anyway,
- 12 I mean -- oh, I meant Senator Kennedy, but she is not
- 13 here.
- It was mentioned there could be integration with 14
- the electric sector and that may have been a factor. 15
- 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
- you, or Mr. Moody --20
- 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

- it best, El Paso made a good presentation on this,
- Transwestern will say it, as the electric and power 2.
- 3 industries get more integrated, especially here in the
- 4 west where a lot of our generation is natural gas fired,
- the traditional "one doesn't worry about the other" is 5
- 6 qoing by the wayside. And there is a national movement
- 7 through AGA, NAESB to change those rules, look at the
- scheduling rules. That's one thing, scheduling gas. 8
- 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
- might matter in Arizona or California. California had 12
- 13 curtailments during this, too. So it is a big thing.
- And we always find out about it when it breaks. 14
- 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.
- We have representation there and we do our best to 19
- 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

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- 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?
- 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.
- 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.

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1 There is going to be a rate case coming up on 2. Southwest Gas. This might be included in that discussion. But for purposes of today I just wanted to 3 4 hear the parties' initial, initial positions on some of the consumer requests that we have had for compensation, missed days of work, things like that. I know it might 6 7 add up to a lot of money, but I want to initially hear from the folks. 8 I have no predisposition on this. I am sitting 9 10 as a judge when I ask this question. Who wants to --11 MR. BROWN: Chairman Pierce, Commissioner Newman, Justin Brown on behalf of Southwest Gas. I will 12 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 regulations, you know, given the weather event and the 17 force majeure associated with that. As we review those 18 claims, if they are weather event force majeure related, 19 2.0 we would not be paying those claims. If there are 21 incidents where, as we review these, where we believe maybe it is something that Southwest Gas did outside of 22 that weather related 'event, the company would then, you 23 know, review that in terms of whether compensation would 2.4

be justified or not.

- 1 COM. NEWMAN: And for purposes of the record, we
- are making a record now, would you -- not everyone on 2
- 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
- similar to this weather related event that's outside the 9
- 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
- vain, but, as a Jewish person, but I also heard it 14
- 15 colloquially called act of God.
- MR. BROWN: It is commonly referred to that, 16
- 17 absolutely.
- 18 COM. NEWMAN: Okay. So how many folks are you
- in contact with approximately in the service area that 19
- 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
- know, there may be some that the company has received, 5
- 6 they just hadn't made it to the person that is keeping
- 7 track of those claims. But according to that person, I
- think we were at 44. 8
- 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
- could technically do that, I think, if you are a 18
- 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
- service area there are probably businesses as well along 24
- 25 Skyline and those areas that might have been affected.

- 91
- I am not sure. I am not sure of the extent of the
- boundaries in the Foothills where the outage occurred. 2
- 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
- legal position that you wouldn't pay for it. However, 12
- 13 you might make further, you might make compensation in
- the future, and complete my sentence, if what. 14
- 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
- related force majeure event, you know, the company does 19
- 20 not plan to pay those claims. However, if as we review
- 21 them, the facts and circumstances associated with that
- particular customer, we learn something that we, 22
- 23 Southwest Gas, did that would have contributed or
- caused, you know, certain damages, we are going to look 2.4
- 25 at those, because we want to make that situation right.

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

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- majeure defense. But just given your experience and 1
- your wealth of education, is there? 2
- 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 quess 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
- human health in Arizona, to Arizonans? 17
- 18 MR. MOODY: I think a general answer I would
- make is it is never good to have a customer out. We are 19
- 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
- deal with anybody from the company. A gas company, we 4
- 5 have a different burden.
- CHMN. PIERCE: I think there would be a much 6
- 7 more, there would be an emergency plan that was
- different than with natural gas most certainly. But I 8
- 9 think it would be a problem, if any of us can imagine,
- because it would -- invariably those things happen when 10
- 11 it is extremely hot, it seems like.
- And I listen to this, but, and I want to talk to 12
- 13 just the storage folks, because I had the discussion
- earlier. It was said that everyone believes it would 14
- have been, if we had storage, it would have been 15
- limited. But in this situation, I think we know there 16
- 17 is enough storage, there is enough capacity if we build
- it to, I think, more than compensate for what occurred 18
- in this incident, and probably for one that is twice as 19
- long an incident or more, with the proper amount of 20
- storage. And what is being proposed down in Elov right 21
- 22 now, I believe, could have handled this much more. And
- I want you to comment on that. 23
- 24 MR. BOWE: For Arizona Natural Gas, Chairman, we
- would agree that had the Eloy facility been fully 25

- operational with the capability we have designed into 1
- the facility, we could have provided an awful lot of 2
- 3 precious support in the heart of the market. Whether it
- 4 would have eliminated all potential problems I am not
- qualified to say. I speak out of turn all the time, 5
- but I am not a hydraulic, pipeline hydraulic engineer, 6
- 7 but it would have provided a substantial quantity of
- 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
- for the shortfall. And the facility would have been 12
- able to carry on in that fashion, assuming that it was 13
- built to its design capacity and was essentially full at 14
- 15 the time, for several days. So you could have had a
- half a billion cubic feet a day of gas being introduced 16
- into the market for several days to make up for 17
- shortfalls in the availability of gas coming into the El 18
- 19 Paso and Transwestern systems.
- 20 I quess perhaps El Paso had a little bit more
- trouble in Permian than Transwestern did. But in both 21
- 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
- have had a different outcome. 25

- 1 CHMN. PIERCE: Well, and I think it would have
- been a dramatic difference. And I think it would have 2
- 3 beyond -- and I think natural gas storage will take us
- well beyond. And we can expand natural gas storage in 4
- that area, can we not, to how much more than the initial 5
- 6 phase that you are talking about?
- 7 MR. BOWE: It is a matter of money, of course.
- 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.
- MR. BOWE: In the initial design I think, if I 24
- 25 am not mistaken -- I will look to the back of the

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- room -- three bcf of capacity, four, and we could go 1
- 2 beyond that, although it takes time. The reality is
- that the leaching process isn't instantaneous. But you 3
- 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
- 1.0 true as we continue to try and integrate renewables such
- 11 as wind and solar.
- 1.2 The way that is done at the bulk power level is
- 1.3 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
- become more and more critical over time as renewable 16
- 17 portfolio standards, in the case of California, kick in
- 18 and as other initiatives are pursued to reduce the use
- of coal fired generation. 19
- 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
- the United States over the last decade, is to be able to 24
- 25 load follow the variations in demand that we see with

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- gas fired power generation. And we only see that
- increasing over time.
- 3 As to your question as to whether there would
- have been a greater public health impact from the loss
- of gas during the summer, I Can't speak in terms of
- 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
- collapse. That has happened elsewhere in the United 9
- 10 States, I think it was in August of 2004 in the New York
- area, not because of natural gas per se but because of 11
- some other transmission related problems. And it took 12
- 13 several days to get power back on in New York City.
- That would be a difficult thing to cope with with 120 14
- 15 degree heat here in Arizona.
- 16 CHMN. PIERCE: Thank you.
- 17 And my time is up and we will go to Commissioner
- Burns, if you have questions. By the way, you don't 18
- have to have questions. But I am going to go in order. 19
- And so you have an opportunity. 20
- COM. BURNS: Lucky for everybody I left my notes 21
- 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
- did not know where my fellow, all my fellow 25

- Commissioners were on this issue, but it looks like you 1
- 2 certainly have got a Commission here who is all very
- favorable towards natural gas storage and well aware of 3
- 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.
- 7 in the letter that I sent out, you know, I was
- reflecting on Senator Spitzer, or Commissioner Spitzer's 8
- comments back in 2003, 2004. And there were 9
- Commissioners then who were very supportive and wanted 10
- to see us go that direction. And, you know, my, my view 11
- of it has always been with regard to gas price 12
- volatility. And those were the comments that 13
- 14 Mr. Spitzer had made. But now we see obviously another,
- 15 at least I have been enlightened, another big reason to
- have it as well. So hopefully we can make some progress 16
- on it. But I know the devil is always in the details. 17
- 18 Just two other things.
- 19 One is I just wanted to make a comment.
- 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

- the Tucson area that you didn't have the availability 1
- 2 for in Sierra Vista. You may have other clients or
- customers that live in areas without the reverse 911. 3
- 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
- would be very interested in knowing if they have any 8
- comments that they would like to share as a result of 9
- 10 anything they have been hearing here.
- 11 CHMN. PIERCE: And, well, at any time Staff can
- pipe in, but I think, Commissioner Burns, it might be a 12
- 13 good time, then, let them respond, because that will
- 14 wipe out your time.
- COM. BURNS: You would rather hear from them 15
- 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
- don't have anything specific to add to the discussion. 20
- 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
- have and the fact that they had used all they could as 24
- 25 far as the capacity on the output of that storage. And

- it was about 250. And I am not good with the, with 1
- 2 the -- okay, I think it was 250 million decatherms,
- 3 something like that.
- 4 MR. CLEARY: That's correct.
- MR. OLEA: As far as the units. And that's all 5
- 6 they could get out of it. But I did ask the guestion 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
- part of the storage problem be satisfied if you could 10
- 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
- pipes -- but if you double the size of the output from 14
- that, would that have helped, or if you tripled the size 15
- 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
- didn't get storage in Arizona for whatever reasons that 24
- 25 was, would increasing the output of the storage that

- 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
- facilities that we need at the storage field itself to 13
- 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
- system. There would be a limit to how much you could 6
- 7 get out of the Washington Ranch facility that would
- provide the kind of pressure push you would like to have
- in a situation which you have seen pressures decline. 9
- 10 That's why market area storage would provide a real
- 11 benefit.
- 12 One other reality is that salt cavern storage
- has the virtue of very, very high deliverability 13
- 14 relative to the amount of capacity that is developed, so
- that effectively you are pulling gas out of what amounts 15
- 16 to a very large hole in the ground. You have to manage
- a reservoir, a reservoir like the Washington Ranch 17
- 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
- whole lot of deliverability almost instantly. 23
- 24 is a difference. No question that having additional
- 25 deliverability as Washington Ranch would have been

- helpful. Having the amount of deliverability you could 1
- get out of a gas storage facility right at the heart of
- 3 the market would have been more helpful still.
- CHMN. PIERCE: We just have to weigh wheeling. 4
- 5 Commissioner Burns has a follow-up.
- 6 COM. BURNS: Yes, one remark, ves. 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?
- 2.5 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.
- Mr. Olea actually asked my question. 7
- 8 CHMN. PIERCE: Well, thank you, Mr. Olea.
- All right. We will go back to Commissioner 9
- 10 Newman.
- COM. NEWMAN: Thank you, Mr. Chairman. A couple 11
- 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
- and talking to some of the stakeholders that we have 15
- 16 enough information to know that storage is an important
- 17 point. And I would love to co-sponsor with any of the
- Commissioners a workshop with the stakeholders on 18
- 19 workshops, on storage.
- 20 In fact, I don't even believe all the players
- are necessarily sitting at this table. In fact I know 21
- 22 they are not. There are some other potential suppliers
- 23 in competition to produce storage in Arizona who are not
- represented here. They are in the audience but they are 24
- 25 not ready to present today.

- 107
- 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
- question about communications. You had noted that Pima 6
- 7 County had a pretty robust 911 system. Of course, you
- know, the taxpayers have to pay for that. They were 8
- working on it for a long time. A lot of grants that 9
- 10 came out of Homeland Security after 9/11 helped the
- 11 situation. But in a place like Cochise County, I happen
- to know that we have one Homeland Security director that 12
- 13 we appointed. And there was one gentleman who worked
- for many years. We just had one gentleman, sort of a 14
- 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
- to use 911. And I think this would be of interest to 18
- 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

- 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
- boundaries that had to be defined to about 18,000 4
- 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.
- We also looked at in Cochise County utilizing a 11
- 12 similar system that they had. However, their system
- 13 would only allow for a 15 second message. And we tried
- to craft as concise of a message as we could. It was 14
- 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
- abbreviated so much that it wouldn't have been 19
- meaningful to them, so we opted not to use it. 20
- 21 Now, the predictive dialing system that we are
- 22 looking into as a company, if that's a viable resource
- and the company decides to utilize that system in our 23
- call centers, would not be an emergency type system. We 24
- could utilize it for many purposes hopefully throughout 25

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- 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
- 1.3 in time I don't have an answer to your question. So I
- don't know the costs of such a system or whatever of the 14
- 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
- mitigate some potential water table problems in your 24
- 25 design, and that there is other designs out there, which

- 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
- cost, if you will, of your plan, which I believe 4
- mitigates some of the potential environmental water 5
- 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.
- 1.3 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 --
- 1.8 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
- project to pay. There would be a reservation charge 23
- 24 that would reserve the right to a particular quantity of
- capacity. There would be a variable charge that would 25

- 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
- have been in discussion with customers about are the 4
- 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
- would take that possibility in account and allow some of 17
- the benefit of that to flow back to the subscribers who 18
- have made the project possible. 19
- 20 COM. NEWMAN: And then, of course, the
- shareholders wouldn't necessarily be, wouldn't foot that 21
- 22 cost. You are talking about ratepayers down the line,
- aren't you? 23
- 24 MR. BOWE: For the commitments for capacity,
- yes, we would expect the customers to make the

- commitments and make the pledge economically viable.
- 2 Now, of course, the project's developers, the
- shareholders take the risk of completing the project and 3
- of bringing it in at a cost that's commensurate with 4
- 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
- have to mitigate by being a prudent operator. But there 8
- 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
- one of these projects on. My clients have done it 12
- before in a number of cases and has significant 13
- 14 experience in getting it done. But it is not a risk
- free proposition. 15
- 16 CHMN. PIERCE: We are going to move.
- 17 Commissioner Stump.
- 18 COM. STUMP: Thanks, Mr. Chairman, a couple of
- 19 brief questions.
- Sir, I don't recall if you mentioned this 20
- already, but did you speculate as to how many jobs might 21
- 22 be brought into the Eloy area should storage be
- 23 implemented there or fully implemented?
- MR. PASTOR: We have looked at that as far as 24
- work force development. I don't have the numbers off 25

- 1 the top, or at my fingertips here. But at peak force we
- are probably talking about 400 construction staff or
- more. 3
- 4 COM. STUMP: And my understanding is that Eloy
- 5 is rather ideal topographically and otherwise. And, of
- 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.
- COM. STUMP: Yeah. Thanks. 12
- CHMN. PIERCE: Could we, and I think there could 13
- 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
- that 17
- 18 MR. BOWE: We would be happy to provide that
- 19 one.
- CHMN. PIERCE: Well, Mr. Crockett was in a 20
- 21 meeting and I know we could have that before I am done
- with this next question, and then we can make sure we 22
- 23 are correct.
- 24 I want to go to price stability, what happens to
- 25 price stability, and Southwest Gas can answer this,

- others could, by having natural gas storage, what that
- does when all of a sudden we see we are short, or maybe, 2
- 3 because it is a guessing game each day, and we buy here
- and at the end of the day we have got -- we need to sell 4
- some. And when we need to sell some, bad things happen 5
- to price. It is amazing, but I just bought it, I just 6
- 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?
- MR. MOODY: Well, certainly for Southwest Gas, 10
- if we had storage, the top of the list is daily 11
- 12 balancing. But one of the side notes of daily balancing
- on the system is that, for example, if you can take away 13
- 14 the customer outage portion of this and just assume
- everybody got their service, we paid as much as 10 or 15
- 16 \$11 a decatherm for gas that we purchased late cycle,
- that if we had storage we would have --17
- 18 CHMN. PIERCE: When you say late cycle, in a
- 19 day.
- 20 MR. MOODY: Yes, I better explain myself. Thank
- you. I am going to be more clear. 21
- 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
- moves on, I have different kinds of gas deals that I 24
- have to purchase for my customers. And we find out 25

- demand changes and then we want to satisfy that. And 1
- 2 the price goes up because it is under high demand and it
- is late and it is typically coming into the system later 3
- 4 on. So certainly that variation of price stability, I
- 5 would then have a choice of using storage gas or
- purchasing that day. That's the simple version. Also
- 7 you are going to have an inventory value. You have a
- value of gas in the ground. And so that gets to be a 8
- 9 fairly complex mix.
- 10 The second place is that, with storage, we can
- line up gas deals that are more ratable. They don't 11
- have peaking capabilities added to them. And so on a 12
- 13 day when we don't need to burn the gas, we night 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
- day after they were 4. So we don't have these prolonged 20
- periods of time of volatility maybe we were having in 21
- 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
- considered in each study we would bring to the
- Commission. 3
- 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.
- MR. PASTOR: And there would be 20 permanent 11
- 12 positions at the facility.
- CHMN. PIERCE: All right. Now, that would be 13
- over a period of a couple years that happening? 14
- 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.
- CHMN. PIERCE: Very good. Thank you. 18
- 19 Commissioner Burns.
- COM. BURNS: Well, I think he answered the only 20
- other question I had on that. And that was the 21
- long-term employees, did you say 20? 22
- 23 MR. PASTOR: That's correct.
- 24 COM. BURNS: And what kind of jobs are those?
- 25 MR. PASTOR: Those are facility operators and

- maintenance staff at the site as well as some 1
- 2 environmental specialists that would do some monitoring
- 3 activities as well.
- MR. BOWE: Generally skilled jobs. 4
- 5 CHMN. PIERCE: Thank you.
- Commissioner Kennedy. 6
- 7 COM. KENNEDY: Mr. Chairman.
- 8 The project in Eloy, do you have the support of
- the Pinal County supervisors? Are they on board? 9
- 10 Anybody?
- CHMN. PIERCE: I quess the question would be 11
- 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
- met with them. 21
- 22 CHMN. PIERCE: Can we get -- you know, it would
- 23 be great to have someone, if you want to, that has that
- information to come up and answer Commissioner Kennedy's 24
- 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 quy.
- CHMN. PIERCE: But, you know, we have met with 4
- the company as well and we know everybody involved. So 5
- we would love to have -- go ahead and identify yourself 6
- 7 and then --
- MS. McCAFFREY: Deirdre McCaffrey from NGS
- 9 Energy.
- We have met with all the county, three county 10
- supervisors. They have recognized that it is a benefit 11
- to Pinal County. The location especially would help 12
- 1.3 potentially grow that as one of the generation points
- for the State of Arizona. We have begun the permitting 14
- proCess for the air permit which would be given by the 1.5
- County. So they are interested in how our continuing 16
- 17 conversations go with the city and the whole area. But
- in general they have been supportive of it. 18
- 19 CHMN. PIERCE: Stay there for a moment.
- COM. KENNEDY: I am done. I just wanted that 20
- one question. 21
- CHMN. PIERCE: Okay. Well, race back over to 22
- 23 Commissioner Newman.
- COM. NEWMAN: Yeah. It is my understanding that 24
- Pinal County supports the double tracking and station --25

- 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
- the Newman or Picacho Basin, however you want to call 4
- 5 it. And I have talked to Mr. Rios, who is supportive of
- creating more jobs in Pinal County and is generally 6
- 7 supportive.
- 8 But there is some confusion. There was some --
- 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
- concern, but they more or less support the project. 12
- 13 That was my understanding from informal conversations I
- have had with the supervisors. Is that your 14
- 15 understanding?
- 1.6 MS. McCAFFREY: Yes. I mean they have asked
- questions and will continue to follow up for the filing 17
- 18 process which will give opportunities throughout the way
- for -- but we have had no formal filings of opposition 19
- 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
- scrutiny over the water issues, of water table issues. 23
- That's my read on the situation. 24
- 2.5 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
- cost on the ratepayers ultimately or your shareholders, 11
- 12 and we might be able to develop some sort of project
- with the assistance of the Homeland Security Secretary 13
- 14 and her staff. And there is some able lobbyists in the
- 15 room that would be able to achieve that.
- What do you think of that proposal? 16
- MR. CLARK: Well, Commissioner Newman, that 17
- certainly is something that we can look into. I 18
- understand there are two options in this arena. One, 19
- 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
- can purchase outright the system, have that technology 24
- in house. So we will look at all of those aspects and 25

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- 1 make the proper decision which is best for the
- 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
- interacting and talking to several of the California PUC
- 7 officials, trying to trade notes with them about gas
- issues in the west. And I quess I had heard that there 8
- 9 is a very, very, a long-term contract that PG&E, I
- 10 believe, the northern California electric utility got a
- very good deal on long-term gas prices. 11
- 12 Now, there is this economic nexus that -- I am
- not, I am not the economist or the mathematician to 13
- understand these price differentials, but because -- so 14
- California just got a very good long-term contract. I 15
- 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
- it appropriate to this forum. Always remember that I 24
- 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.
- And today if you were paying \$8, there is some supplier 2
- 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
- always look at longer term contracting. And it could 6
- 7 have the outcome you just described, or it could have an
- unthought of outcome, which is back in the days when we 8
- 9 were all going to need LNG. A local distribution
- company has extremely variable load, and we were going 10
- 11 to need to buy the gas the same amount every day. And
- as I alluded to earlier, in order to secure a deal like 12
- 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
- back through El Paso to some Arizona storage area. And 16
- that would be the only way you could accomplish it, 17
- because on the days you didn't need it, you would still 18
- have to take the gas or put it into storage somewhere. 19
- 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
- company, we are all, we have all looked at each other's 24
- nonproprietary stuff, and these things all will get 25

- considered and we will have a chance to look at them in
- 2 the open.
- 3 COM. NEWMAN: Okay. Actually that calls for
- 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
- long-term contracts it doesn't reduce the need for 11
- 12 storage, because your typical gas supply contract has
- this force majeure provision that allows the producer to 13
- get out of providing the gas if there is weather 14
- 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
- the long-term contract with a producer, say, in the San 19
- 20 Juan Basin, you would probably still have the issue
- 21 where that supply becomes a little bit interruptible
- when the weather gets colder. 22
- 23 So I think you would still, you would still want
- gas storage even if you did get some long-term 24
- 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: Okav.
- 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
- will be my final stint at this. 9
- 10 I don't want Southwest Gas to run out of the
- room right now, but I have a couple of tough comments to 11
- 12 I am glad that the two executives flew in from
- Nevada today. I do realize that Southwest Gas is a 13
- 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
- represent Southwest Gas I have known a long time. But 18
- 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

- live. That is where I serve. And that is my home and
- 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
- with nothing but Southwest Gas issues, problems. They 8
- were angry. And I felt like I walked into an ant bed. 9
- But I mean, I mean I was elected to do this. So I am 10
- not unhappy, but I do think that Southwest Gas and their 11
- 12 customers here in Arizona deserve a little bit more.
- 13 Which one of you has already decided when your
- 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
- at hand. We are looking at sharing information. We are 19
- 20 looking at modeling our systems on both sides, on the
- 21 transmission side from their part, on the distribution
- system on Southwest Gas' part, so that we can really get 22
- 23 our arms around what opportunities in the future we
- might have to work together and ensure that, if there is 24
- 25 infrastructure that needs to be installed, that we take

- 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,
- sitting right behind me --11
- 12 COM. KENNEDY: You are not passing the buck, are
- you? 13
- 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
- media, and with all the resources that we had at our 17
- 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
- commitment that we have, is that we need to take a good, 24
- 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
- wanted was when will you get to my house. We could not
- answer that question adequately to our customers. We 5
- would like to be able to do that in the future. 6
- 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
- it you have not seen the letters that have been included 10
- 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
- you are speaking of, no.
- 15 COM. KENNEDY: I invite you to look at those
- letters in the docket. In fact, the Chairman read from 16
- a couple of those letters earlier today. And attached 17
- to those letters that they sent us is the letter that 18
- you and Mr. Moody, I believe, sent out. 19
- 20 MR. CLARK: Mr. Shaw.
- 21 COM. KENNEDY: Shaw, thank you. So --
- 22 MR. CLARK: Yes.
- COM. KENNEDY: I am not pointing fingers at 23
- your PIO. I just want to make sure you are not passing 24
- the buck. But I want to make sure that you hear me 25

- loudly and clearly. 1
- 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
- people, of coming into their homes and restoring their 8
- service. So we understand that, in any event, we can 9
- learn from it, we can critique it, and we can strive to 10
- do oetter in the future. And that is our goal. 11
- 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
- overall fault in this lies with the system isn't what we 19
- 20 wanted. And somewhere along the line someoody is going
- to be responsible for making sure that it changes. 21
- And, you know, Mr. Shaw is here, and he is at 22
- the top of that. I am sure he is going to make sure 23
- that someoody is going to be the person responsible. 24
- 25 And for us, I think whoever that is and who is going to

- be leading those changes, we ought to know who is going 1
- 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
- local folks really well, but they are not the ones that 4
- are going to be check tasked with this. And we would 5
- kind of like to know who that is. 6
- 7 MR. CLARK: Well, Chairman Pierce, I suspect I
- will be charged with that responsibility, being the vice 8
- 9 president in southern Arizona. So I will, I will take
- 10 that responsibility on. We will communicate with the
- Commission as we move forward. And the folks behind me 11
- 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 qoing to take it on for the whole Company to make --
- 16 because whatever system you develop ought to be one in
- which the Company is going to use, or somewhere. I mean 17
- that's -- this is an issue in southern Arizona today. 18
- It could be an issue in Southwest's service territory 19
- somewhere else tomorrow. So we just want to make sure 20
- 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
- southern Arizona satisfactorily, that ought to be maybe 24
- 25 a Company standard.

- 1 MR. CLARK: Okay. From the respect of
- infrastructure, that will be my responsibility. For 2
- 3 technology, I will have to look to some of my staff
- 4 co-workers to assist in those decision processes and in
- 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
- happening, well, who are the people assigned, what is 12
- 13 the schedule to make sure that we are going to have a
- system, when is it going to be tested if there is 14
- 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
- service, they want to know that everything is 19
- 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
- them as well. We are almost --22
- 23 MR. OLEA: Mr. Chairman.
- 24 CHMN. PIERCE: Yes.
- 25 MR. OLEA: Steve Olea.

- CHMN. PIERCE: Okay, Mr. Olea. 1
- 2 MR. OLEA: Yes. And if I could just add to
- 3 something that both you and Ms. Kennedy were talking
- about, since I already stole one of her questions, is 4
- that we had asked and Mr. Johnson had called the 5
- 6 Department of Emergency Services for the state and asked
- them to be here at this meeting. They could not be here 7
- 8 because they are in the middle of doing their mock
- exercise for Palo Verde. 9
- 10 But I think that, you know, some of this ties in
- to everything that has been talked about here. I think 11
- 12 maybe the Commissioners at a Staff meeting should get
- the Department of Emergency Services there and talk to 13
- 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,
- with the companies we found out that in Texas, when the 19
- electric companies did their curtailment plans that were 20
- approved by ERCOT, that the gas facilities were not part 21
- of the critical structure that was to be left on. And 22
- 23 at the time that made total sense, because I am sure
- that in Texas, the way we do here, they do mock 24
- exercises, but when they tested in Texas they probably 25

- 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
- thought of the electric companies losing power in the 4
- 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,
- state emergency services could coordinate with the 21
- 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

- 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
- emergency services hasn't thought of, okay, what happens 4
- 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.
- 1.3 CHMN. PIERCE: And then we are going to wrap
- this up because otherwise we are going to need to go to 14
- a break, and I think we can do it without going to a 15
- 16 break.
- 17 COM. NEWMAN: Yes, I just have a few remaining
- questions. And actually the Staff anticipated also one 18
- 19 of the things I was going to say. So I will start out
- with what Steve said for the purposes of transition. 20
- 21 Mock exercises are a good idea. Blacktop
- exercises is another way of describing them in the 22
- 23 emergency services field. So I certainly agree with
- Staff that, and with the Commissioner, with the Chairman 24
- 25 by his question of summer/winter analysis, that we

- should have blacktop exercises, summer problems, winter 1
- 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
- Arizona, and whoever is listening to this who wants to 7
- 8 enter into the foray of trying to get the least cost
- storage that we can in Arizona, and the safest storage, 9
- 10 that we, that the Commission has been available before
- to review just for our eyes only some of these cost 11
- 12 numbers. And that would be very helpful to all of us.
- And we have done those sorts of agreements with our 13
- 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
- numbers and we will look at them so we have an idea of 18
- what they are. It is very important for us to know that 19
- 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
- Staff, I was going to ask you a number of guestions. 24
- 25 But I have -- have we gotten back to all the folks that

- have reached Mr. Martinez in our Tucson office who took
- the bulk of the calls for southern Arizona? Has there 2
- 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
- Services Staff. We had a total of 259 calls in to our 11
- Consumer Services group that dealt, well, with the 12
- outages in Tucson and Sierra Vista. And there was, 180 13
- 14 of those were inquiries and 79 were complaints. And I
- asked my Staff to actually define what is the difference 15
- 16 between a complaint and an inquiry.
- 17 An inquiry is one that we can answer on our own
- that we answered. So there is 180 that we answered on 18
- 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
- response to the customer. And if that closes it, then 23
- it is closed there. 24
- 25 COM. NEWMAN: Okay. But given the fact that we

- will have more hearings, I am sort of making a, you 1
- 2 know, soft request that these folks be particularly
- noticed because they got through to us. And we haven't 3
- 4 ignored them, I know. Staff does a good job. But I
- just want them to understand that we will have southern 5
- Arizona hearings, if they have other information for us, 6
- 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
- would just add not a question as much as direction from, 14
- at least from me. City, county, ACC Staff, as was 15
- mentioned, State Emergency Services staff, you might 16
- even invite, you know, emergency service people from 17
- other counties, work through the county organization and 18
- 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
- conclude with is this. We, Arizona spends \$2.5 billion 23
- in importing natural gas from out of state. As you 2.4
- know, we don't have natural gas. That's \$1.7 billion in 25

- 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
- billion. That is an awful lot of money that our 5
- 6 ratepayers are paying for a resource that we don't have.
- 7 And I am a bit on the soapbox on this, but
- natural gas is much cleaner than coal. We have a 8
- preference for natural gas. However, it is very costly. 9
- 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
- east. It is an incredible study that they have done. I 17
- also understand that the EPA is going to be coming out 18
- 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
- help us have a good energy system and a clean energy 24
- system and reliable energy system. So we are just 25

- hoping that when I mention that number and how big a 1
- number that is, you know, perhaps it could get less if 2
- 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
- \$2.5 billion, which is a big chunk. And we would like 7
- 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
- with them. But I think that the customers deserve the 13
- 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,
- and your shareholders. 17
- Just last response given that number from both 18
- pipeline and Southwest Gas as well. 19
- 20 CHMN. PIERCE: If you could in as short amount
- of time, whoever wants to respond. 21
- COM. NEWMAN: That's the only question I had. 22
- MR. MOODY: There is no doubt that over the past 23
- ten years, if you average the cost of gas, the commodity 24
- is much more expensive than the infrastructure. But we 25

- 1 are not typically meeting to discuss the last failure.
- We are talking about rates. And every decision that we 2
- 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
- reality is every rate paid a ratepayer somewhere pays 6
- 7 it. And we do that prudently. And that is the
- interaction between our commissions. 8
- 9 And you are right, two and a half billion
- dollars is a lot of money. And we all, as utility, as 10
- the Commission, shepherd that money hopefully in the 11
- most efficient way for our customers. 12
- 13 CHMN. PIERCE: Okay. I was going to ask a
- question of El Paso, and then we are going to wrap up. 14
- 15 The map you have given, and I noticed it many,
- 16 many times, but the San Juan Basin sort of meanders
- around Four Corners and picks up a little bit of 17
- Arizona. Is that an artist using, you know, just, you 18
- 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
- couple of wells in the far northeastern corner of the 25

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- 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
- does provide some of that, so, but that's it, not very 6
- 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
- that they need -- they would like to understand better. 14
- 1.5 And I don't think all of those things were fully vetted
- 16 today. And I think having the company have access to
- the correspondence we receive so that the company is 17
- 18 prepared for that as we go out and talk --
- 19 And I have had a little discussion with my
- Staff. It is probably not likely we would do this in 20
- 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
- think -- this coming fall. And that's not going to 23
- 24 work. So we are going to try and organize something in
- a very short amount of time. We are going to check with 25

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- people's calendars between now and the end of the month,
- 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
- there might be questions so that we can talk about some 10
- 17 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
- easy form of writing. I mean that's what I would advise 20
- 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
- so that information is out there. And we can, and we 25

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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 coordinate that with the Commissioners to make sure that 4 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 questions, come prepared to accept anger towards us, 10 towards you. People are upset. And we want to do this 11 in a soon enough time to where it, to where we will get 12 13 a good turnout so they will feel we weren't neglected. Some people thought we were neglecting this. 14 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 people concerned. But there were others who probably 17 would have thought don't do anything, Commission, that's 18 going to slow this process down in getting my gas. And 19 that's kind of how I looked at it. We were going to 20 21 look into this, but we are probably not going to help 22 the cause in getting people's service back on. important for us to encourage you all to do it, but most 23 24 certainly what people elect us to do is to make sure

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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STATE OF ARIZONA 1 SS. COUNTY OF MARICOPA) 3 7 I, COLETTE E. ROSS, Certified Reporter No. 8 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 10 11 foregoing matter, all done to the best of my skill and 12 ability. 13 14 WITNESS my hand this 11th day of March, 2011. 15 16 17 Original transcript filed with Docket Control signed by Court Reporter 18 19 COLETTE E. ROSS Certified Reporter 20 Certificate No. 50658 21 22 23 24