APPENDIX B. TASK FORCE MEETING MATERIALS AND MINUTES

Meeting Agenda March 10, 2021 | 10:00 a.m.

TASK FORCE MEMBERS

Secretary Becky Keogh, Department of Energy & Environment Secretary Mike Preston, Department of Commerce Director Lawrence Bengal, Oil and Gas Commission Director Kevin Pfalser, Liquefied Petroleum Gas Board

AGENDA ITEMS

10:05 a.m. • Review Executive Order 21-05

10:15 a.m. • Briefs provided by Task Force members

10:35 a.m. • Schedule upcoming Task Force meetings and establish format

10:50 a.m. • Review testimony list

11:05 a.m. • Review proposed Task Force timeline

11:30 a.m. • Adjourn meeting

MINUTES

DETAILS

Date and Time: 03/10/2021 | 10:00 am

Location: E&E Headquarters Commission Room

Subject: Initial Meeting

Task Force

Becky Keogh, E&EKevin Pfalser, LiquifiedLawrence Bengal, Oil and GasSecretary, Task Force ChairPetroleum Gas Board Director,Commission Director, Task

Task Force Member Force Member

Michael Preston, Commerce

Secretary, Task Force

Member

Other Attendees

Mitchell Simpson Jeff LeMaster Donnally Davis
Daniel Pilkington Tricia Treece Beth Thompson
Troy Deal Shane Khoury Julie Linck

AGENDA ITEMS

1. Call to Order Secretary Keogh

Secretary Keogh, as Task Force Chair, called the meeting to order at 10:00 am on 3/10/21. The meeting was paused to provide additional time for transportation and reconvened at 10:12. Secretary Keogh reviewed the Task Force's charge under EO 21-05 and each task member provided opening remarks.

2. Task Force Meetings, Format and Task Force Members Testimony List

Secretary Keogh introduced a proposal developed by staff to provide questions to identified persons/organizations, collect written testimony, and hold hearings to provide task force members with an opportunity to ask questions about the written testimony.

Director Bengal suggested that in-person meetings make sense for the 4 task force members; however, remote participation should be an option for those required to give testimony if they do not live in the Little Rock area.

Secretary Preston supported the approach of collecting written testimony with a meeting to ask questions. Secretary Preston noted that the written testimony may prompt follow-up questions for the meeting.

Director Pfalser also supported use of Zoom as an option for testimony.

Secretary Keogh introduced the concept of grouping persons/organizations identified for providing testimony to organize meetings and questions to include to guide written testimony.

Director Bengal supported grouping and reflected that this may create synergies for gathering information.

Director Pfalser indicated that there were additional groups not included in EO 21-05 that should be called upon for testimony to ensure that the task force is hearing from the production, storage, transportation, distribution, and the end users of energy. Director Pfalser will provide a list of additional contacts to E&E staff.

Secretary Preston indicated that the list was a place to start, but should be kept fluid.

Secretary Keogh suggested that the questionnaire sent to persons/organizations required to provide testimony include the following question (or similar):

"Are there any other persons or organizations that the task force should hear testimony from relevant to the task force's charge under EO 21-05"?

3. Timeline

Secretary Keogh

Secretary Keogh introduced a proposed timeline developed by staff for developing questions, collecting written testimony, holding meetings, and preparing the report. The task force will reconvene the week of March 22 or March 29 to finalize a list of questions to send to persons/organizations identified for testimony.

4. Adjournment

Secretary Keogh

Secretary Keogh offered the task members an opportunity to make any further remarks and adjourned the meeting at approximately 10:50 am.

Meeting Agenda March 29, 2021 | 3:00 p.m.

TASK FORCE MEMBERS

Secretary Becky Keogh, Department of Energy & Environment Secretary Mike Preston, Department of Commerce Director Lawrence Bengal, Oil and Gas Commission Director Kevin Pfalser, Liquefied Petroleum Gas Board

AGENDA ITEMS

3:00 p.m. • Call meeting to order

3:05 p.m. • Updates from Task Force members

3:20 p.m. • Discuss proposed timeline and testimony list for hearings

3:35 p.m. • Discuss list of questions for testimony purposes

4:00 p.m. • Adjourn meeting

MINUTES

DETAILS

Date and Time: 03/29/2021 | 3:00 pm

Location: E&E Headquarters Commission Room

Subject: Timeline and Testimony Questions

Task Force

Becky Keogh, E&E **Kevin Pfalser,** Liquified **Lawrence Bengal,** Oil and Gas Secretary, Task Force Chair Petroleum Gas Board Director, Commission Director, Task

Tarla Farra Maralana Farra Maralana

Task Force Member Force Member

Michael Preston, Commerce

Secretary, Task Force

Member

Other Attendees

Jeff LeMasterDonnally DavisBeth ThompsonDaniel PilkingtonTricia TreeceShane Khoury

Troy Deal

AGENDA ITEMS

1. Call to Order Secretary Keogh

Secretary Keogh, as Task Force Chair, called the meeting to order at 3:00 pm on 3/29/21. Secretary Keogh reviewed the Task Force's charge under EO 21-05 and each task member provided opening remarks. Task members noted additional entities that came forward with interest in presenting to the task force.

2. Timeline Secretary Keogh

Secretary Keogh presented a revised timeline with a goal of finalizing questions for pre-filed testimony by March 31, 2021, submitting questions to the identified entities by April 8, 2021, and requesting pre-filed written responses from identified entities by April 30, 2021.

3. Testimony List and Questions Task Force Members

Secretary Keogh presented a revised testimony list including entities identified in the EO and others who requested to present to the task force. The task force discussed whether some of the entities could be represented by an organization that they are a part of. Director Bengal suggested breaking the hearings up into logical groupings of entities. Director Bengal also suggested that the user group be heard first to outline the problems experienced. Task force members committed to reviewing the testimony list, providing suggested edits, and finalizing the list by noon on March 31, 2021.

Secretary Keogh provided task members a list of potential questions for consideration. Task force members supported building off of other investigations and hearings conducted by the Legislature and other state agencies to ensure efficiency and target inquiries toward energy as a resource, potential incentives, transparency, etc. rather than pricing. The task force committed to reviewing the questions, suggesting edits, and finalizing the list by noon on March 31, 2021.

4. Adjournment

Secretary Keogh

Secretary Keogh adjourned the meeting at approximately 3:39 pm.

March 29, 2021 | 3:00 p.m.

PROPOSED TASK FORCE TIMELINE

•	March 19, 2021	Proposed questions from Task Force members due
•	March 29, 2021	Second Task Force meeting to review proposed questions
•	March 31, 2021	Finalization of questionnaire
•	April 9, 2021	Distribution of questionnaire to interested parties
•	April 30, 2021	Questionnaire responses due
•	May 2021	Public hearings
•	Mid July 2021	Completion of preliminary draft
•	August 1, 2021	Proposed draft submitted and followed by 15-day public comment period
•	September 15, 2021	Draft final report to Task Force
•	September 30, 2021	Final report submitted to the Governor's Office

March 29, 2021 | 3:00 p.m.

TESTIMONY LIST

1. Public Service Commission (PSC)

Contact: Ted Thomas, Commission Chairman

Phone: 501-682-2051

Address: 1000 Center Street, Little Rock, AR 72201

2. Mid-Continent Independent System Operator (MISO)

Contact: John Bear, CEO **Comms Analyst**: Christina Ruth

Phone: 501-244-1500

Address: 1700 Centerview Drive, Little Rock, AR 72211

3. Southwest Power Pool

Contact: Barbara Sugg, CEO Phone: 501-614-3200

Address: 201 Worthern Drive, Little Rock, AR 72223

4. Entergy AR

Contact: Laura Landreaux, CEO

Phone: 501-377-4000

Address: 425 West Capitol, Little Rock, AR 72201

5. Arkansas Electric Cooperatives of AR

Contact: Vernon "Buddy" Hasten

Phone: 501-570-2200

Address: 1 Cooperative Way, Little Rock, AR 72209

6. Southwestern Electric Power Company

Contact: Bradley Hardin, External & State Governmental Affairs

Phone: 479-973-2347

Address: 101 West Township, Fayetteville, AR 72703

7. Oklahoma Gas & Electric Company

Contact: Sean Trauschke, CEO

Phone: 405-553-3000

Address: 321 North Harvey, Oklahoma City, OK 73102

8. Empire District Electric Company DBA Liberty Utilities

Contact: Kelli Price, Spokesperson

Phone: 417-850-6953

Address: 1010 8th Avenue, Gravette, AR 72736

9. Arkansas Municipal Power Association

Contact: Travis Matlock Phone: 479-271-3135 ext. 2

Address: 1000 Southwest 14th Street Bentonville, AR 27212

10. Centerpoint Entergy

Contact: David Lesar, CEO Phone: 800-992-7552

Address: 401 West Capitol, Suite 102, Little Rock, AR 72201

11. AR Oklahoma Gas Corporation (Parent Company Summit Utilities)

Contact: Kurt Adams, President and CEO

Phone: 479-783-3181

Address: 115 North 12th Street, Fort Smith, AR 72902

12. Black Hills Energy

Contact: Chad Kinsley, Vice President of Operations

Phone: 1-888-890-5544

Address: 655 Millsap Road, Fayetteville, AR 72703

13. AR Electric Energy Consumers (AEEC)

Contact: Steve Cousins Phone: 501-570-2200

Address: 1 Cooperative Way, Little Rock, AR 72209

14. AR State Chamber of Commerce

Contact: Randy Zook, President and CEO

Phone: 501-372-2222

Address: 1200 West Capitol, Little Rock, AR 72201

15. Arkansas Environmental Federation (AEF)

Contact: Ava Roberts Phone: 501-374-0263

Address: 415 North McKinley, Suite 835, Little Rock, AR 72205

16. Arkansas Independent Producers of Royalty Owners Association (AIPRO)

Contact: Rodney Baker **Phone:** 501-975-0565

Address: 1491 West Capitol Avenue, Suite 440, Little Rock, AR 72201

17. Quattlebaum Law Firm

Contact: Michael Heister **Phone:** 501-379-1700

Address: 111 Center Street, Suite 1900, Little Rock, AR 72201

18. Mitchell Williams Law Firm

Contact: Stuart Spencer **Phone:** 501-379-1700

Address: 425 West Capitol Avenue, Suite 1800, Little Rock, AR 72201

19. PPGMR, LLC

Contact: John Peiserich Phone: 501-603-9000

Address: 201 East Markham Street, Suite 200, Little Rock, AR 72201

20. Energy Policy Network*

Contact: Randy Eminger, Executive Director

Phone: 806-674-7079

Email: randyeminger@gmail.com

Address: 7 Balsham Lane, Bella Vista, AR 72714

21. Enterprise Products Partners LP*

Contact: W. Randall Fowler, Co, CEO

A.J. Teague, Co, CEO

Michael Hanley, Pipelines and terminals

Phone: 713-381-6500

Address: 1100 Louisiana Street, 10th Floor, Houston, TX 77002-5227

22. NGL Energy Partners LP*

Contact: Michael Krimbill, CEO

Jayson Fishel, Operations Coordinator

Phone: 918-481-1119 **Cell:** 765-894-9075

Address: 6120 South Yale Avenue, Suite 805, Tulsa, OK 74136

23. TARGA Resources*

Contact: Scott Pryor, Logistics and Transportation

Kelley Atkins, Greenville Terminal

Phone: 713-584-1100 **Cell:** 479-200-1776

Address: 811 Louisiana Street, Suite 2100, Houston, TX 77002

24. CHS*

Contact: Adam Delawyer, Executive VP CHS Energy

Mark Porth, Senior Account Manager

Phone: 651-355-8508 **Cell:** 816-812-3331

Address: 5500 Cenex Drive, Inver Grove Heights, MN 55077

25. Silica Transport Inc.*

Contact: James Knight, President

Phone: 870-346-5811

Address: P.O. Box 9, Guion, AR 72540

26. Ozark Petroleum*

Contact: Scott Sefton, Operations

Cell: 870-213-6920

Address: 1939 West Main Street, Mountain View, AR 72560

27. Craft Propane Inc.*

Contact: Rohn Craft, President

Phone: 870-932-4325

Address: 3203 Dan Avenue, Jonesboro, AR 72401

28. Sungas Inc.*

Contact: Jimmy Reynolds, Owner

Lance Reynolds, Owner Jim Burcham, Manager

Phone: 501-581-7500

Address: P.O. Box 102, Damascus, AR 72039

29. Arkansas Propane Gas Association*

Contact: Melissa Moody, Director

Phone: 501-350-1213

Address: P.O. Box 3632, Little Rock, AR 72203

30. Office of Arkansas Attorney General Leslie Rutledge*

Contact: Chuck Harder, Deputy Attorney General

Phone: 501-682-4058

Address: 323 Center Street, Suite 200, Little Rock, AR 72201

31. Jackson Walker*

Contact: Michael J. Nasi, Attorney at Law

Phone: 512-236-2216

Address: 100 Congress Avenue, Suite 1100, Austin, TX 78701

32. Arkansas Forest & Paper Council*

Contact: Brent Stevenson, Executive Director

Phone: 501-372-4500 **Cell:** 501-519-7260

Email: brent@brentstevensonassociates.com

Address: 318 South Pulaski Street, Little Rock, AR 72201

^{*}Proposed additional contacts for testimony.

March 29, 2021 | 3:00 p.m.

TESTIMONY QUESTIONS

PUBLIC SERVICE COMMISSION

- 1. What energy source could augment natural gas enough to ensure an adequate supply of electricity during a weather condition like Arkansas experienced in February of 2021?
- 2. Are there any incentives the state could provide to help ensure an adequate supply of electricity?
- 3. Is there anything the state can do through regulatory requirements or incentives to help with adequate supplies of diesel for back-up generation?
- 4. Could additional Liquefied Petroleum Gas Peak Shaving help prior to or after the custody transfer/city gate with natural gas end use or electrical generation?
- 5. What would be your recommendations going forward to help ensure adequate supplies of both natural gas and electricity for the state?
- 6. With respect to the planned changes in the electric generation capacity mix over the next decade, what steps are being taken to ensure that the mix can provide sufficient generation to serve peak load during extreme weather events?
- 7. Are there reasonably available storage solutions for natural gas or electricity that could be implemented in the state? What are current barriers to deployment of storage technologies? Are there uses for these storage solutions during day-to-day operations in addition to providing backup during extreme peaking events so as to reduce the cost to value ratio? Are there changes to Arkansas law, Public Service Commission tariffs, or state agency rules that would be needed to be made to implement these strategies? If so, what changes would you suggest?
- 8. To what extent did implementation of energy efficiency programs by the utilities in accordance with Public Service Commission rules reduce the need to shed load during the February weather event? Are there changes to the energy efficiency rules, targets, or Energy Office programs that should be made to put downward pressure on electricity and natural gas heating demand through increased energy efficiency?
- 9. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 10. What regulatory requirement could be changed or done away with that would allow or help ensure adequate supplies of natural gas both for end use and electrical generation?
- 11. What new regulatory requirement could be put in place that would allow or help ensure adequate supplies of natural gas both for end use and electrical generation?

ELECTRIC UTILITIES

(Entergy, Arkansas Electric Coop, Southwestern Electric, Oklahoma Gas and Electric, Empire District Electric, Arkansas Municipal Power Association)

- 1. What energy source could augment natural gas enough to ensure an adequate supply of electricity during a weather condition like Arkansas experienced in February of 2021?
- 2. Are there any incentives the state could provide to help ensure an adequate supply of electricity?
- 3. Is there anything the state can do through regulatory requirement or incentives to help with adequate supplies of diesel for back-up generation?
- 4. Could additional Liquefied Petroleum Gas Peak Shaving help with additional electrical generation?
- 5. What would be your recommendations going forward to help ensure adequate supplies of electricity for the state?
- 6. With respect to the planned changes in the electric generation capacity mix over the next decade, what steps are being taken to ensure that the mix can provide sufficient generation to serve peak load during extreme weather events?
- 7. Are there reasonably available storage solutions for gas or electricity that could be implemented in the state? What are current barriers to deployment of storage technologies? Are there uses for these storage solutions during day-to-day operations in addition to providing backup during extreme peaking events so as to reduce the cost to value ratio? Are there changes to Arkansas law, Public Service Commission tariffs, or state agency rules that would be needed to be made to implement these strategies? If so, what changes would you suggest?
- 8. To what extent did implementation of energy efficiency programs by the utilities in accordance with Public Service Commission rules reduce the need to shed load during the February weather event? Are there changes to the energy efficiency rules, targets, or Energy Office programs that should be made to put downward pressure on electricity and natural gas heating demand through increased energy efficiency?
- 9. Are there changes that you would suggest integrated system operators consider to their dispatch process to allow for increasing generation for the purposes of holding electricity in storage (e.g. pump storage or battery) in advance of a forecast extreme weather event? If so, what changes would you recommend? Are there constraints in place from Federal Energy Regulatory Commission or North American Electric Reliability Corporation that would prevent implementation of such changes?
- 10. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 11. What regulatory requirement could be changed or done away with that would allow or help ensure adequate supplies of natural gas?
- 12. What new regulatory requirement could be put in place that would allow or help ensure adequate supplies of natural gas?

- 13. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 14. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

NATURAL GAS PRODUCERS AND SUPPLIERS

(Center Point Energy, Ark Ok Gas Corp, Black Hills Energy, AIPRO)

- 1. What improvements could be made to the weatherization of gas wells and other gas infrastructure in Arkansas, Oklahoma, and Texas to prevent a natural gas resource constraint like what was experienced during the February weather event? Should changes be made to Arkansas law or state agency rules to implement these changes for Arkansas's natural gas infrastructure?
- 2. To what extent can Arkansas coordinate with Texas and Oklahoma to ensure that the region has adequately weatherized natural gas infrastructure?
- 3. What regulatory requirement could be changed or done away with that would allow or help ensure adequate supplies of natural gas?
- 4. What new regulatory requirement could be put in place that would allow or help ensure adequate supplies of natural gas?
- 5. Are there any incentives the state could provide to help ensure an adequate supply of natural gas?
- 6. Could additional Liquefied Petroleum Gas Peak Shaving help prior to or after the custody transfer/city gate?
- 7. What would be your recommendations going forward to help ensure adequate supplies of natural gas for the state?
- 8. Are there reasonably available storage solutions for natural gas that could be implemented in the state? What are current barriers to deployment of storage technologies? Are there uses for these storage solutions during day-to-day operations in addition to providing backup during extreme peaking events so as to reduce the cost to value ratio? Are there changes to Arkansas law, Public Service Commission tariffs, or state agency rules that would be needed to be made to implement these strategies? If so, what changes would you suggest?
- 9. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 10. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 11. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

REGIONAL TRANSMISSION ORGANIZATIONS

(MISO, SPP)

- 1. What is your role and responsibilities during shortages of critical energy resources?
- 2. What energy source could augment natural gas enough to ensure an adequate supply of electricity during a weather condition like Arkansas experienced in February of 2021?
- 3. With respect to the planned changes in the electric generation capacity mix over the next decade, what steps are being taken to ensure that the mix can provide sufficient generation to serve peak load during extreme weather events?
- 4. Are there changes that integrated system operators need to consider to their dispatch process to allow for increasing generation for the purposes of holding electricity in storage (e.g. pump storage or battery) in advance of a forecast extreme weather event? If so, what changes would you recommend? Are there constraints in place from Federal Energy Regulatory Commission or North American Electric Reliability Corporation that would prevent implementation of such changes?
- 5. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 6. What regulatory requirement changed or done away with that would allow or help ensure the adequate supply of electricity in the state?
- 7. What new regulatory requirement could be put in place that would allow or help with the supply of electricity in the state?
- 8. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 9. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

LIQUEFIED PETROLEUM GAS

PIPELINE

(Enterprise Products Products Partners LP)

- 1. What existing regulatory requirement could be changed or done away with that would help strengthen your position within the state?
- 2. What new regulatory requirement could be put in place to ensure adequate supply during shortages of critical energy resources?
- 3. Are you aware of any planned additional Liquefied Petroleum Gas pipeline terminals within the state in the near future?
- 4. Are additional pipeline terminals within the state possible?
- 5. Are there any incentives the state could provide that would strengthen your position within the state or could help add additional terminals?

- 6. In order to pull product off your line do you have a minimum barrel requirement?
- 7. Do you work off of annual purchase for seasonal allocation?
- 8. What would be the suggested total above ground Liquefied Petroleum Gas storage requirement to adequately serve a terminal?
- 9. Are there currently any points along your pipeline in Arkansas that would readily lend itself to building a terminal?
- 10. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 11. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 12. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

TERMINALS

(NGL, Targa, CHS)

- 1. Are there any incentives the state could provide that would strengthen your position within the state?
- 2. Do you currently have any expansion plans within the state?
- 3. What would be your recommendations to help secure adequate supplies of Liquefied Petroleum Gas for the end user within the state?
- 4. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 5. What existing regulatory requirement could be changed or done away with that would help strengthen your position within the state?
- 6. What new regulatory requirement could be put in place that would help strengthen your position within the state?
- 7. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 8. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

TRANSPORTATION

(Silica Transport, Ozark Petroleum)

- 1. Are there any incentives the state could provide that would strengthen your position within the state?
- 2. What would be your recommendations to help secure adequate supplies of Liquefied Petroleum Gas for the end user within the state?

- 3. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 4. What existing regulatory requirement could be changed or done away with that would help strengthen your position within the state?
- 5. What new regulatory requirement could be put in place that would help strengthen your position within the state?
- 6. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 7. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

DEALER

(Craft Propane, Sungas, APGA)

- 1. Are there any incentives the state could provide that would strengthen your position within the state?
- 2. Would increasing storage with in the dealer network help manage an adverse weather event?
- 3. Would an increase in the number of wholesalers within the state help manage an adverse weather event?
- 4. Would an increase in the number of pipeline or rail terminals within the state help manage an adverse weather event?
- 5. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 6. What existing regulatory requirement could be changed or done away with that would help strengthen your position within the state?
- 7. What new regulatory requirement could be put in place that would help strengthen your position within the state?
- 8. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 9. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

ENERGY USERS

(Arkansas Electric Energy Consumers, Arkansas State Chamber of Commerce, Arkansas Environmental Federation)

- 1. Do Arkansas business owners whose facilities were asked to curtail operations during the February weather event feel they were treated fairly and given adequate notice? Would you suggest any changes to the prioritization of gas and electricity or communications regarding extreme weather events? If so, what changes would you make?
- 2. Did the curtailment during the load shedding event damage or reduce the effectiveness of environmental quality control equipment? Are there strategies that could have been implemented to mitigate the impacts of curtailment and the extreme cold on control equipment?
- 3. Are there other entities not included in the Executive Order from which the Energy Resources Planning Task Force should hear testimony?
- 4. Describe your preparedness and allocation process for critical energy resources during extreme events.
- 5. Describe your notification process to end users when curtailing services. How does the end user appeal or request consideration of unique circumstances upon notification?

Meeting Agenda May 12, 2021 | 3:30 p.m.

TASK FORCE MEMBERS

Secretary Becky Keogh, Department of Energy & Environment Secretary Mike Preston, Department of Commerce Director Lawrence Bengal, Oil and Gas Commission Director Kevin Pfalser, Liquefied Petroleum Gas Board

ZOOM CALL INFORMATION

Meeting Link:

https://zoom.us/j/98092202656?pwd=bmdOMHhONkRuM3F0SmhNRGNOTzdvUT09

Meeting I.D.: 980 9220 2656

Passcode: 896330

AGENDA ITEMS

3:30 p.m. • Call meeting to order

3:35 p.m. • Pre-filed testimony status

3:50 p.m. • Hearing schedule

4:05 p.m. • Testimony format discussion

4:30 p.m. • Adjourn meeting

MINUTES

DETAILS

Date and Time: 5/12/21 | 3:30 pm

Location: Zoom

Subject: Testimony Status and Hearing Schedule

Task Force

Becky Keogh, E&E Kevin Pfalser, Liquified Lawrence Bengal, Oil and Gas

Secretary, Task Force Chair Petroleum Gas Board Director, Commission Director, Task

Task Force Member Force Member

Michael Preston, Commerce

Secretary, Task Force

Member

Other Attendees

Donnally Davis Tricia Treece Shane Khoury

Troy Deal

AGENDA ITEMS

1. Call to Order Secretary Keogh

Secretary Keogh, as Task Force Chair, called the meeting to order at 3:30 pm

2. Pre-Filed Testimony Status Task Force Members

Twenty-three entities responded to questionnaires. Some entities requested a time extension for submission of written testimony. Others stated that it might be difficult for them to submit in writing a response representative of all members of their diverse membership and that some of the questions address issues with which their membership may not deal with. Entities also expressed the need to ensure that they do not limit their ability to be responsive to other inquiries.

Task force members agreed to review the written testimony received to date in advance of hearings scheduled for late May/early June

3. Testimony Schedule Task Force Members

Secretary Keogh introduced a proposed testimony schedule produced by E&E staff for discussion. Task force members discussed availability and suggested revisions to the schedule.

The revised schedule suggested by task force members is as follows:

Thursday, May 27: PSC, AG, RTOs, Energy Users

Tuesday, June 1: Natural Gas Suppliers, Electric Utilities

Wednesday, June 2: Liquefied Petroleum, Miscellaneous, and Follow-up.

The task force also discussed the possibility of setting up a make-up date if entities from which testimony was requested could not make the assigned date.

4. Testimony Format Discussion

Task Force Members

Task force members discussed providing 3-5 minutes for each entity to introduce their perspective on the event followed by the opportunity for each task force member to ask one question of the entity.

5. Adjournment

Secretary Keogh

Secretary Keogh adjourned the meeting at approximately 3:55 pm.



FOR IMMEDIATE RELEASE:

May 26, 2021

Energy Resources Planning Task Force Public Hearing Notice

NORTH LITTLE ROCK—The Energy Resources Planning Task Force will hold its first of three public hearings at 1:30 p.m. on May 27, 2021. All organizations that have been asked to provide testimony have been notified.

The public hearing will be live-streamed on Arkansas PBS at: https://www.myarkansaspbs.org/ arcan/home. If you are unable to access the meeting via television or internet, then please contact EEComms@adeq.state.ar.us to obtain instructions for how to listen via telephone.

On March 3, 2021, Governor Hutchinson signed Executive Order 21-05 to establish the Energy Resources Planning Task Force. The Task Force is made up of the Arkansas Department of Energy and Environment, the Oil and Gas Commission, the Liquefied Petroleum Gas Board, and the Department of Commerce.

CONTACT: EE-Press@adeq.state.ar.us

###

PUBLIC HEARING AGENDA

THURSDAY, MAY 27, 2021

1:30 p.m.-4:30 p.m.

1:30 p.m.– 3:00 p.m.

Call Meeting to Order

Public Hearing Guidelines:

- Task Force Chair will moderate
- Testimony will be limited to five minutes
- Q&A will be limited to fifteen minutes

Order of Testimony:

- 1. Public Service Commission, Chairman Ted Thomas
- 2. Attorney General Office, Deputy Attorney General Chuck Harder
- 3. Mid-Continent Independent Systems, Executive Director Daryl Brown and Legal Counsel Randall Bynam
- 4. Southwest Power Pool, Executive Vice President and General Counsel Paul Suskie

3:00 p.m.

Recess

3:15 p.m.– 4:30 p.m. **Call Meeting to Order**

Public Hearing Guidelines:

- Task Force Chair will moderate
- Testimony will be limited to five minutes
- Q&A will be limited to fifteen minutes

Order of Testimony:

- 1. Arkansas Environmental Federation, Executive Director Ava Roberts
- 2. Arkansas Electric Energy Consumers, Executive Director Steven Cousins
- 3. Arkansas Forest and Paper Council, Executive Director Brent Stevenson, Attorney Kelly McQueen, Retired General Manager Domtar Buddy Allen
- 4. Quattlebaum Law Firm, Managing Member Michael Heister

MINUTES

DETAILS

Date and Time: 5/27/21 | 1:30 pm - 4:30 pm

Location: Department of Energy and Environment (E&E) Headquarters, Live streamed

on Arkansas PBS

Subject: Public Hearing

Task Force

Becky Keogh, E&E

Secretary, Task Force Chair

Steve Sparks, Director, Existing Business Resources, representing Mike Preston, Commerce Secretary **Kevin Pfalser,** Liquefied Petroleum Gas Board Director,

Task Force Member

Lawrence Bengal, Oil and Gas Commission Director, Task

Force Member

Other Attendees

Mike Ross, Senior Vice President, Southwest Power Pool, Inc.

Michael Heister, Attorney, Quattlebaum, Grooms & Tull PLLC

Shawn McMurray, Attorney, representing AEEC and AGC

Chuck Harder, Arkansas Attorney General's Office

Ted Thomas, Chairman of Arkansas Public Service Commission

Kelly McQueen, Attorney, representing AFPC

Trent Minner, Assistant Attorney General, Arkansas Attorney General's Office

Daryl Brown, Executive Director, External Affairs South Region, Midcontinent Independent System Operator, Inc. (MISO)

Randall Bynum, Partner, Dover Dixon Horne PLLC

Paul Suskie, Executive Vice President, Policy and General Counsel, Southwest Power Pool, Inc. (SPP)

Caleb Stanton, Legisltavie and Agency Liaison for Energy, Environment and Transportation, Arkansas Governor's Office

Buddy Allen, AFPC

Leslie Davis, President, Arkansas Environmental Federation (AEF)

Steven Cousins, Executive Director, Arkansas Electric Energy Consumers, Inc. (AEEC) and Arkansas Gas Consumers, Inc. (AGC)

Madison Wright, Dover Dixon Horne PLLC

Christina Baker, Assistant Attorney General, Arkansas Attorney General's Office

Brent Stevenson, Director, Arkansas Forestry and Paper Council (AFPC)

Ava Roberts, Executive Director, Arkansas

Environmental Federation

John Bethel, Director of Public Affairs, Entergy

Shane Khoury, E&E

Donnally Davis, E&E

Arkansas, Inc.

Andrea Hopkins, E&E Daniel Pilkington, E&E

Troy Deal, E&E

Tricia Treece, E&E

Beth Thompson, E&E

Julie Link, E&E

AGENDA ITEMS

1. Call to Order Secretary Keogh

Secretary Keogh, as Task Force Chair, called the meeting to order at 1:35 pm. Secretary Keogh explained hearing logistics. For each organization, opening testimony was limited to five minutes with up to fifteen minutes for questions and answers from Task Force Members

2. Summary of Chairman Ted Thomas' Testimony

Public Service Commission Chairman

Chairman Ted Thomas explained that natural gas production was a problem during the February 2021 winter event. It was too cold for some of the natural gas production that the system relies upon. In addition, other generation assets did not meet expected performance levels.

Chairman Thomas provided three suggestions for long-term planning of energy resources:

- 1) Do not silo the reliability discussion from climate policy discussion. A better political debate of carbon reductions, cost to consumers, and reliability is needed.
- 2) We need to explore demand response to match intermittent generation with intermittent load. There should be appropriate price signals that incentivize consumers to voluntarily reduce load when needed.
- 3) Existing generation assets need to perform better when called upon.

Chairman Thomas was asked whether there is a backup fuel of choice if a fuel source is interrupted. Chairman Thomas responded that a fuel source isn't secure if someone wants to ban it. He suggested looking into demand response and market-based policies.

Chairman Thomas was asked whether dispatchable generation, such as the coal plant in Independence County, should remain operational. Chairman Thomas responded that what really matters is the regional resource mix. Even if Arkansas's resource mix is perfect, we would still be blacked out if there is a blackout in the region. We should study whether dispatchable generation should remain, but there are downsides to preserving older resources: the Independence units were some of the units that had difficulty running during the event, they are older and harder to maintain, they are the largest un-scrubbed plants, making them a target for expensive emission control retrofits, and a future carbon policy could make the units even more costly to run.

Chairman Thomas was asked whether there was anything the state could do to independently require fuel usage. Chairman Thomas responded that it was easy to require a fuel to be used, but a violation of federal law to prohibit the fuel from crossing the state line. The problem is a question of cost. If federal policy puts a carbon tax in place and we have mandated use of a high carbon fuel, we are

mandating that we have to spend more than we would otherwise have to. There is value in diversity rather than putting all of the eggs in the cheapest basket when there is risk.

Chairman Thomas was asked whether price or politics are driving fuel choice right now. Chairman Thomas responded that it is mostly price. However, he discussed the need to address subsidies. A subsidy is justified to scale up a technology, but not once technology becomes scaled. For wind, the production tax credit is no longer needed. The solar investment credit subsidy is better structured because it reduces the amount of the subsidy as costs go down. Chairman Thomas suggested taking the wind subsidy away and instead subsidizing storage to scale up that technology.

3. Summary of Testimony from Chuck Harder, Deputy Attorney General for Public Protection

Arkansas Attorney General's Office

Mr. Harder explained that the Attorney General's Office is looking into what happened in two capacities: as the consumer advocate for Arkansas and as the ratepayer advocate for Arkansas. The Attorney General's Office is investigating operational issues during the event, costs to consumers, and whether there was any price gouging.

Mr. Harder was asked if there were any recommendations that the Task Force should work on to benefit what the Attorney General's Office and Public Service Commission are doing. Mr. Harder suggested looking into how we determine who is shut off first if an energy shortage event happens again, whether there are facilities that are critical to continue to operate to prevent large-scale economic damage, and providing tools to municipal utilities so they have the ability to pay if fuel costs rise due to a shortage.

Mr. Harder was asked if the Attorney General's Office would be investigating price gouging, and if the natural gas supply had not been affected by the weather event. Mr. Harder responded that they perform an investigation whenever the Governor declares an emergency, but the investigation probably would not have been as intense if the freeze offs had not occurred.

4. Summary of Testimony from Daryl Brown, Executive Director, External Affairs South Region

MISO

Mr. Brown provided a report to Task Force members that steps through what happened, lessons learned, MISO operations during the event, and important considerations related to the reliability imperative.

Mr. Brown pointed out that this was the most extreme weather event facing the MISO region in the last 30 years. Their approach served the region well in the past, but must be revised to address challenges faced today. There are different risk profiles as more renewable energy enters the system and based on a predicted increase in extreme events.

Mr. Brown provided 5 key takeaways:

- 1) Generation performance is critical
- 2) Weatherization can mitigate risk. Standard criteria should be established.
- 3) Resource adequacy planning needs to change to a seasonal model instead of annual. Currently, they plan around the summer peak. However, there were times during the February 2021 storm when load exceeded the summer peak.
- 4) Adequate transmission is vital. There was adequate energy produced during the storm, but transmission constraints hindered delivering electricity where it was needed.
- 5) Improved planner tools are needed for the operations of the future.

Mr. Brown was asked whether gaps in transmission were identified and if Mr. Brown had

recommendations to address them.

Unlike ERCOT- the grid in Arkansas is more interconnected. Power can flow across different footprints in the Eastern Interconnect. MISO's Reliability Imperative Living Document (provided to the Task Force) outlines recommendations for what needs to take place to fill those gaps. MISO does not own the assets so discussions among utilities and regulators in the fifteen states where MISO operates is needed to look at what to build and how to pay for it.

Mr. Brown was asked whether MISO has any influence on fuel type for new plants. Mr. Brown explained that MISO doesn't decide what to build. Their goal is to ensure the lowest cost of generation to meet demand.

Mr. Brown was asked about whether there were any renewable fuels that are not intermittent. Mr. Brown explained that renewable energy sources on the grid are all intermittent. However, there is some work being done to evaluate the use of hydrogen as a renewable energy source.

Mr. Brown was asked about how ad hoc conversations held during the February 2021 event might be formalized. Mr. Brown suggested that they could have quarterly or semi-annual meetings to discuss public-private partnerships. Mr. Brown suggested that the Public Service Commission would be best situated to formalize such an ongoing conversation.

Mr. Brown was asked about the composition of the fuel mix in the MISO footprint. Mr. Brown made Task Force members aware that there is a MISO app that shows the fuel mix at any given time. Mr. Brown explained that the ability to leverage energy from across the MISO region and across the Eastern Interconnect is the key to being successful at assuring reliability.

Mr. Brown also mentioned a report that MISO put together on a forward-looking report on electrification. The preliminary findings from this report were introduced to the Task Force and provided to the court reporter.

5. Summary of Testimony from Paul Suskie, Executive Vice President of Regulatory Policy and General Counsel

SPP

Mr. Suskie explained that the February 2021 event was the first in SPP's 80 year history where they had a load shedding event of this magnitude region wide. Mr. Suskie pointed out that although this was a first for SPP, it has occurred multiple times across the country. SPP is presenting a comprehensive report on lessons learned from the event to its Board of Directors in July. Mr. Suskie praised Ted Thomas for his expertise and assistance on the Regional State Committee. Mr. Suskie explained that SPP is a transmission planner and a market operator that balances load with generation on the system. Too much or too little generation can lead to blackouts. Mr. Suskie described three load shedding events in SPP during the February 2021 event and explained that cascading blackouts did not occur because they were able to pull energy across the entire eastern interconnect. Mr. Suskie explained that the cost of natural gas directly impacts the market because in most cases cheap gas is setting the market value.

Mr. Suskie was asked whether there were any lessons learned. Mr. Suskie explained that they valued their coordination with MISO on planning for the grid of the future, seams projects, and other maters. MISO provided a large amount of power to the SPP footprint during the event. Many of the lessons learned from a 2018 event were implemented during the February 2021 event.

Mr. Suskie was asked what the source of the power imported into SPP was during the event. Mr. Suskie explained that you cannot know the fuel source when you are pulling in energy at that volume.

Mr. Suskie was asked how the changing fuel mix will affect the ability to respond to events in the future absent a natural gas disruption. Mr. Suskie explained that coal and natural gas underperformed, based on what those resources are credited for reliability purposes. Mr. Suskie explained that you dispatch the cheapest energy first and that wind bids in negative prices on the market. In a deregulated system like ERCOT without a capacity market, the cheapest generation gets built. Vertically integrated systems, such as the SPP state systems, provide more protection.

Recess

2:45 pm – 3:15 pm

6. Summary of Testimony from Ava Roberts, Executive Director

AEF

Ms. Roberts explained that the AEF members who responded to questions submitted by the Task Force indicated that earlier and more detailed information is needed before curtailment. Members who responded indicated that curtailment did not reduce the effectiveness of environmental control equipment.

Ms. Roberts was asked about how the notification process should change, whether any members have the ability to generate their own electricity if there is a load shed, and whether there was a differentiation in notices from electricity and natural gas. Ms. Roberts responded by stating that AEF's members did not go into detail on those issues, but that she is happy to follow-up with them to get answers to the questions posed by task members.

7. Summary of Testimony from Steve Cousins, Executive Director and Shawn McMurray, Outside Counsel

AEEC and AGC

Mr. Cousins explained that the February 2021 winter event was a tale of two cities. He is not aware of a single group in his membership that had electricity interrupted who were not on an interruptible contract. On the natural gas side, most members with equipment that could be damaged by cold weather weren't aware of the procedure to an file plant protection affidavits and some didn't know they were going to be curtailed until someone showed up to shut off the gas.

Mr. Cousins also explained that many customers were not aware of the spot price of gas that they were purchasing. Mr. Cousins suggested improvement in real-time price signaling would allow customers to make a business decision to self-curtail when prices get too high.

Mr. Cousins was asked whether there was a need to have a required notification process from a regulatory standpoint or best practice. Mr. Cousins emphasized that the notification system on the electric side is working and that the notification requirements are spelled out in the tariff. Although the ability to obtain a special needs waiver is in the gas tariff, not many people are aware of it. Nothing in the tariff talks about notifications and advanced warning.

Mr. Cousins was asked about possible solutions to provide more transparency of real-time costs for gas. Mr. Cousins explained that he wasn't sure about a regulatory basis for solving the real-time cost transparency issue. However, there could be requirements spelled out in private contracts. Mr. Cousins suggested that suppliers could provide a notice when the Henry Hub spot price for gas takes a major jump in cost. Mr. Cousins also explained that current firm and interruptible parts of a gas contract are primarily set up for addressing issues with pipeline capacity, not lack of gas in the pipeline.

Mr. Cousins was asked about who a special needs waiver is filed with. Mr. Cousins explained that it

is filed with the interstate pipeline company.

Mr. Cousins was asked about who was affected by curtailments in his membership. Mr. Cousins indicated that he doesn't have a feel on how the decisions on who got gas and who didn't were made. Mr. Cousins indicated that on the propane side, the biggest single problem was truck traffic being hampered. This made it difficult to re-supply.

8. Summary of Testimony from Kelly McQueen, Buddy Allan, and Brent Stevenson, Director **AFPC**

Ms. McQueen emphasized the large footprint of AFPC members in Arkansas. Ms. McQueen recommended that there should be quicker communication and appropriate price signals for natural gas, ensuring that federal and state rules regarding gas infrastructure do not conflict, and education about affidavits. Ms. McQueen suggested looking at what can be done to enhance interruptible tariff design to bring appropriate value to interruptible customers.

Ms. McQueen was asked whether there were any conflicting rules with respect to DEQ. Ms. McQueen stated that it was more of an issue with utility rules.

Ms. McQueen was asked how many of AFPC members experienced a curtailment and whether it was a natural gas curtailment, electricity curtailment, or both. Ms. McQueen explained that all of their members experienced curtailment. It was a combination of gas and electric depending on the particular circumstance. Ms. McQueen explained that there were a number of members who were curtailed for gas. Most had affidavits in place, but some did not. Members lost tens of millions of dollars due to the need for extra man hours, equipment downtime, increased prices, and damaged equipment.

Ms. McQueen suggested that members didn't have the opportunity to make business decisions based on the exaggerated costs. They operated and then were billed. Ms. McQueen suggested that this is a contractual issue and that better price signaling would help members to decide when to self-curtail rather than pay exorbitant prices. Ms. McQueen suggested that the supplier should be responsible for that communication.

Ms. McQueen was asked whether the cost and damagers were more due to electric or gas. She indicated that gas curtailment is easier to deal with when you have notice. Loss of electric is sudden.

Ms. McQueen was asked whether AFPC was helping to educate members. Ms. McQueen indicated that AFPC is well positioned to help.

9. Summary of Testimony from Michael Heister, Attorney

Quattlebaum, Grooms, & Tull PLLC

Mr. Heister praised state agency staff for being available to pick up the phone and work with him during the event. Mr. Heister explained that clients got short notice that they were going to be shut off because they don't have a special needs affidavit. Putting one together was a quick turnaround and there was no assurance that once on file, the natural gas would be there.

Mr. Heister also pointed out that there were water disruptions due to loss of electricity at water pumps. Mr. Heister urged the Task Force to step back and think about big picture issues. Mr. Heister suggested enhancing education about special needs affidavits. Mr. Heister suggested the Task Force should consolidate its findings in a place that can be used to advise clients. Mr. Heister also suggested a trigger for notice if the price of gas increases by a certain percentage. He also suggested

that there be a voluntary stress test on the system.

Mr. Heister was asked what resources would fund the voluntary stress test and what it should look like. Mr. Heister suggested soliciting feedback on the problems they saw and what kind of equipment is likely to fail. Consultants could create advanced guidance and checklists to advise companies of weaknesses in their internal infrastructure.

Mr. Heister was asked about stress testing for smaller organizations. Mr. Heister suggested that the Task Force could compile a tool kit for assessing energy vulnerabilities rather than having consultants create them from scratch for each company.

10. Closing Remarks

Secretary Keogh

Secretary Keogh concluded the hearing at 4:15 pm.

PUBLIC HEARING

THURSDAY, MAY 27, 2021 AT 1:30 P.M.

TASK FORCE MEMBERS PRESENT:

Ms. Becky Keogh

Mr. Kevin Pfalser

Mr. Lawrence Bengal

Mr. Steve Sparks (on behalf of Mike Preston)

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PROCEEDINGS

May 27, 2021

MS. KEOGH: Today is May 27, 2021. Appreciate you all joining us here at the Arkansas Department of Energy and Environment Headquarters. We come here today to hear testimony for the Energy Resources Planning Task Force at the commission of Governor Asa Hutchinson. I'm Becky Keogh. I'm Secretary of the Arkansas Department of Energy Environment and I have the pleasure of serving this task force, along with Secretary of Commerce, Mike Preston, Director of the Oil and Gas Commission, Larry Bengal, and Kevin Pfalser, who is the Director of the Liquefied Petroleum Gas Board. Today, representing Secretary Preston, we're happy to welcome, Steve Sparks, Director of AEDC, Central Business Resources Division. So we're happy to have Steve join us on behalf of Mike Preston, who is out of state.

On March 3rd of 2021, Governor Asa
Hutchinson signed Executive Order 2105, that
established the Energy Resources Planning Task
Force. Hopefully, you've had a chance to see
this Executive Order, which lays out the

purpose and the goals of the task force. The purpose of this hearing today, as the process, is to gather information, specifically today from testimony, in order to better prepare our states energy infrastructure, in the event of another statewide emergency, as we experienced in February of this year.

As chair of the task force, I will be calling names of organizations that have offered and are willing to provide testimony today. So those of you, I appreciate you being here today. Thank you so much. When I call out the organization that you represent, please come to the podium, and state your name, and title, and the organization for the record, because we're recording this for future review.

We are asking each speaker to -- or each actual organization, to limit testimony to five minutes. Some of you may have multiple speakers, so we ask that you share that time, if possible, as far as any kind of statement you want to make, opening statement today, in your testimony. After you complete your presentation, then I will open the floor to our task force members to ask questions of each of

the representatives. We've allotted about 15 minutes, to try to stay on track. We're going to hear from a large number of parties, some today, and we look forward to being able to ask you some specific questions, that might help us better develop a report, that's due to the Governor in the upcoming months.

So Andrea Hopkins is here, sitting at the front desk, to be the regulator of time for this process. She will keep time, and I know that she will respectfully declare when your time is getting close, and hopefully you'll respect her request to stay within those time limits, just for the benefit of all the other speakers, and respectful of those watching and joining us. We are live streaming this hearing, so for the benefit of the public and others.

We do have two additional days of hearings scheduled. If you want information about those, you're welcome to get them while you're here for those that speak today, and we'll live stream those hearings when they occur next week.

I think I will go back to my original

agenda, and I'm going to open the testimony by asking the Public Service Commission to come forward as our first speaker. Chairman Thomas, if you will just provide your name, title, and the organization after -- in a moment, when we get started. I've just got to mention, that following Chairman Thomas -- we appreciate you being here Chairman Thomas today. It's a privilege having you here today. The Attorney General's Office, will -- we've asked them (indiscernible) Attorney General's Office following Chairman Thomas and the questions that we have for him.

So with that, I will now turn the mic over to you, Chairman Thomas, to begin the process. Again, we're asking for a limit of five minutes in an opening statement and then we'll -- I'll ask the task force members if they have any questions of you. Thank you so much.

MR. THOMAS: Thank you, Secretary Keogh, members of the task force. I'm Ted Thomas.

I'm Chairman of the Public Service Commission.

I'd first like to note, I speak for myself; not my colleagues. These issues are when you're applying someone with stuff that we do, they

have formal hearings. It often puts me in an awkward spot, participating in public discussion while not directly prejudging issues, so that's a line I typically try to walk, but I also like to participate in full discussion, because that's how we (indiscernible).

When one looks at the events that happened in February, the good news is we nicked the wall. If you want to see what crashing into the wall looks like, you can look further south in Texas. They crashed into the wall. We met the wall. Folks in this business, the engineers that built the system (indiscernible) and it happened here, so it's a concern, but we nicked the wall; we didn't slam into it.

Why did that happen? Again, this is preliminary. I brought three things that I'll hand out. These are two charts that basically show the same thing. The problem is a natural gas reduction. If you look at this chart, you can probably see it from there, there's a huge grid dip that recovers and it was too cold for some of our natural gas reduction that we count on. That's what happened, more than anything

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else.

Now, when we have something like this any incremental factor could be considered (indiscernible) so important to what we expect. The problem is when you have a deal like this, you get into what I call the stupid (indiscernible) awards, which I regard as part of the problem, because instead of the policy response, what we often get is the public relations corporate response. So the gas folks have correctly points out, that they were serving more load than anything else, but the problem is, they're making the wrong message. The real message they should be making in my view isn't that, you know, it wasn't us. was this is a world without natural gas, because this debate is inevitably tied to the climate debate, because that which we do to protect ourselves, with cost increases related to the climate debate intermittence causes problems, potentially at eye levels of deployment, when you look at reliability issues.

So we have two related policies that cross. What we need is not corporate public relations.

What we need is policy debate. We don't have the policy debate. Yesterday Politico did an online news site. That it was a bad day for big oil, because they lost a couple of shareholder votes, and lost a case in Europe, which basically a court imposed carbon reduction. The word consumer hardly appears in that article.

The corporate folks assured us that they are committed to carbon reduction. The special interests, you know, counted their victory.

Nobody mentioned the consumer, and here we have to (indiscernible) consumer on costs, and when you debate the climate issue the way it's been debated, you're not protecting the consumer and if you use liability issues as a reason not to (indiscernible) climate stuff, you're not protecting the consumer.

The second big question, this is what happened, is what can we do about it. That's a jurisdictional issue. Here's another hand out. This came out from a MISO slide show. This will be -- one thing I would point out, this is really a division between one of RPOs regional (indiscernible) and what the state does. And

you look at the circle. You know, we have a data head problem. There's nothing that we can do about it. The RPOs are inconsistent.

That's pretty much all the true until you get to five and ten year deal. This is on the MISO side. (Indiscernible) the organization of MISO states, which are the regulators from all the states and we do a survey of what's out there, and so when we're figuring out what our generation mix should be, we know what the other states are doing and MISO knows what all the states are doing. So that's when five years out, when the authority begins to melt some and the court (indiscernible) is long term planning.

So we need to think about the resource mix over the long term, because the RPOs run the system on short term. They run what we bring to the table. We decide what we bring to the table. But in the business where you want assets to last 40 or 50 years, there's a huge (indiscernible) time and this is why political debating matters. This is so important.

Because if we make a 40 year commitment, we're betting that the politics won't change on us.

Because if the politics changes in the day of natural gas and we bought a gas plan, guess what? We still get to pay for it, even though we don't use it. That's the situation we want to avoid. That's why the politics of the climate debate is so intertwined. You have to win the political fight to protect the value of the resource, because if you lose that, you've made a 40-year commitment, your consumers are going to be paying something for 40 years that they don't use.

So that's my initial presentation. This is division of authority, who does what. The State has long term authority over the resource mix, RPO climate day to day. What happened in January -- or February, I mean, gas reduction. That's why it came back so fast. Three weeks after, we didn't even know it happened, looking in the system for a 24 hour period. So I'll be glad to answer any questions. I'm sure you all have questions. I look forward to hearing your questions and presentations of the other speakers.

MS. KEOGH: Thank you, Chairman Thomas. I'm going to turn this over to each of our task

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force members to ask questions. And thank you also for providing some pretrial testimony which we have now before us. I know the pretrial testimony that you submitted, you talk about what you do today, liability of the system, and the effect of the policy issues on fuel choice and fuel supplies. I guess, is there any recommendations that you have that we would want to incorporate in our report regarding how we prepare the State to address this -- this 24-hour period, so to speak, as you talk about, when we had the emergency event, if our (indiscernible) is diverse now, how would we create -- is there any recommendations about what our backup fuel choice would be for our citizens across the state, should our fuel sources be interrupted again?

MR. THOMAS: To me one of things -- well, first of all, you can't separate these debates because they are political. Can't separate this from the climate, because your fuel sources and secure (indiscernible), because you get your butt kicked in every election where this matters, which is a risk of things

happening.

Second, if you have a problem with intermittent load, or intermittent generation, one of the things you can do is have what we call the man response, which makes load intermittent response to that, and to me from a policy perspective, that's a very important thing, having some degree of flexibility with the load, were you basically get paid to reduce your load, so you're taking a volunteer who gets paid for it (indiscernible) reduce load is them, and if you have a price that sets when people do that, to me that is a market based policy, they can compete with other new technologies.

Third, in MISO, while we're looking at it,
I just want to point out about all of this
stuff and I hope that when you looked at the
reports you saw the technical complexity and
the detail, and rigor that goes into that.
MISO issued a report yesterday, and one of
their recommendations is the existing units
that we have, have got to run at a higher level
of performance. There were units that didn't
run. There were units that tripped off, and

because they tripped off, we had to buy natural gas and the supply crunch; it was very expensive. One of the things we need to do is make absolutely sure that the unit's rate payers are paying for, when you get the (indiscernible) determine on when you need them, and it might be under adverse weather conditions that they in fact turn on. That would probably be three main innovations.

First, come put this in a silo. Second, we'd explore intermittent load if we have an intermittent generation problem, and third, stuff that we haven't been granted, we ask (indiscernible.)

MS. KEOGH: All right. Thank you. And I'll ask Director Pfalser, do you have any questions for Chairman Thomas?

MR. PFALSER: Yes. And Commissioner Thomas, I was able to view your testimony that you gave before the legislature sometime back.

MR. THOMAS: Yes.

MR. PFALSER: And I appreciate your candor. In reading through the material that you provided, I don't know why we don't just let you decide what we need to do. It seems like

it makes a lot of sense. I appreciate your perspective. In the testimony that you provided, in the written testimony, on page 9, we asked the question: Over the next decade what steps will ensure that a mix could provide the sufficient generation? And there were three things that you shared with us. Existing base load, this generation should remain in operation, on reserve. And I think you were referring maybe like a hill fire plant, might be in Independence County, something like that, that might be planned for (indiscernible) to maintain that.

MR. THOMAS: Well, we should say that, now, that's a cost factor. And another important thing with all of this, our state is not walled off. Our state is part of the eastern (indiscernible) connectors. Basically, everything west of the continental divide and it's all interconnected. The resource mix that really matters is the regional resource mix. If the regional resource mix is wrong and there's a regional blackout, we will be blacked out, even if our resource mix is perfect. So we have to work within -- and it's not just

other people that's citing it. We've worked with those people. We're stakeholder in their process. We followed and studied and had great relationships in my view, but the (indiscernible) and MISO. We have to remember it's a regional thing. We should say that, but there's also down sides to that.

A few down sides I can think of, one, these were among the units that had difficulty running it, which means we pick the insurance premium but when it was claim time, they were off, and that was a \$150 million bank of the envelope guess. These are older plants that cost a lot. There is also a settlement that would have financial consequences, but to me the issue is what's next after them, and that's the decision that is in the four or five years off time frame.

But I don't want it to be seen as

(indiscernible) to keeping those. If there is

value there, we want to extract it. Another

problem is they're the largest unscrubbed coal

plants in the nation. So they're graduates,

you can use them to work for Joe Biden's EPA,

and you click admissions, and sort by most, you

get two Arkansas plants. There was target on our back.

MR. PFALSER: So could those be retrofitted, or is --

MR. THOMAS: Well, the retrofit, one is almost \$2 million. Now, I've heard that that estimate was wrong. It will be a rigorous process before we went and did that. But if they put tax on carbon, if they ban coal, that's why the political debate is so important. That will determine what options we have, and you have to continue to win, for 50 years, remaining in debt, and the reason why (indiscernible) awards so the people that are losing the fuel wars, I'm going to bet on them, we need (indiscernible) for 40 years, when they watch the last ten, they just get fresh everyday, including yesterday.

MR. PFALSER: The second thing that you pointed out, was to provide a regulatory record for the RPO's, that for -- I guess, the state next generation, to consider Arkansans first, in extreme situations.

MR. THOMAS: Now, I think we might have -I'm not sure we're talking on the same --

MR. PFALSER: I might have somebody else's material?

MR. THOMAS: Yes. My recommendations are on page 9. The first one is don't be in (indiscernible) with respect to the policy issues. I think we should maintain vigorous participation in the RPO stakeholder process. But there is a little bit of difference there, between that and the mandate to the RPO.

MS. KEOGH: Director Pfalser, I'm going to move over to Director Bengal, for a moment, if he wanted -- we'll circle back to you, in case there's a follow-up question you have.

Director Bengal, did you have questions for Chairman Thomas?

MR. BENGAL: Just briefly. Chairman Thomas, I appreciate your recommendations and comments, because sometimes it's hard to say those things. I really do appreciate that. It's good to hear the truth. On your chart for total (indiscernible), that's the U.S. (indiscernible)?

MR. THOMAS: Yes. I think one of these is
Texas only. One report, came from the National
Gas Association, so I think it's total, then

the other chart, came from the Southwest Power Pool Independent Market Monitor, and I think that's limited to Texas, but you can see the same thing. It was an extreme short lived deal, and the future prices never really went up that much.

MR. BENGAL: My question is, you know,
Arkansas originally was a gas importer. We
quickly went above what we could use; however
the location of that Shell, was located within
the pipeline system. On the eastern part of
the state most of that gas leaves Arkansas, and
most of the gas that we use, unfortunately
comes from states that are mostly impacted by
this event.

MR. THOMAS: Yes.

MR. BENGAL: When you look at reliability, and usage, is there anything that the state independently can do, to require fuel usage? I know states are requiring not to use, but how to put power of the state to require a fuel be used.

MR. THOMAS: We could do that. It's easy to require that a fuel be used. It's probably illegal, to prohibit that fuel from crossing

state lines. The problem is that it's a question of cost. If the feds put on a cost prohibitive carbon tax, and we mandated that, and we're mandating that we spend more than we have to -- which if it's a large (indiscernible) number, the value -- and we recognize the value in diversity. You don't want to put all your eggs in the basket, that's cheapest, when the second cheapest, has uncorrelated risks.

It's all a degree of price, and the RPOs run a market when the cheapest stuff runs next from anywhere in the region. That's part of what's causing our problem. We use the cheap one and running, even when it's not subsidized and it lowers the market price, for everything.

MR. BENGAL: At this point in time, do you think that price or politics is driving fuel choices?

MR. THOMAS: I think it's mostly price with a lot of politics. To me, a subsidy is justified, to scale something up, but once it becomes scaled, it's not justified. When you look at the price, we need to compete unsubsidized, because it's scaleable. To be

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continued the subsidy the way they have it, doesn't make any sense, because it's already scaled. I didn't bring my price chart, as I normally bring. In fact I discussed them at the joint interview meeting. You can see the prices go like this, and there's a great public benefit, when you take a price that starts high, and then comes down. It happened with personal computers. It happens with every technology, so to me, a little subsidy to get the price coming down, and once it comes down, take the subsidy off. But the subsidy you made gets lost, by the people who are opposed to subsidies every single time, and the wind subsidies, can be problematic. With solar, there's an investment credit subsidy, so when the price comes down by half, the value of the subsidy is reduced by half. With the wind, you have a reduction. The more you produce the more you get. It's nuts. We should take it off of that, and we should put it on storage to make storage come down like that, but that's not gonna happen. People who want that to happen, uses the debate every single time. That's why the political debate might be of

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some importance, to rationalize these issues.

MS. KEOGH: Thank you Chairman Thomas for preparing for us, and (indiscernible) and your candor and your honesty. But I always appreciate that you bring a lot of good information to the table, and help us in making better choices, so thank you again for being here today. We appreciate your follow-up.

At this point, I'm going to ask the AG's office, to come forward and identify your -- spell thy name and title.

MR. HARDER: Thank you Secretary Keogh.

Secretary Keogh and members of the task force,
my name is Chuck Harder. I'm a Deputy Attorney
General with the Office of Arkansas Attorney
General, Leslie Rutledge. By way of
background, before joining the Attorney
General's Office, I spent 25 years in
leadership roles at Centerpoint Energy, in
areas of the legal regulatory governmental
affairs area. Before joining the Attorney
General's Office, I was the Vice President of
Regulatory Governmental Affairs and Source Gas,
which is now Black Hills.

I'm not going to repeat a lot of what's in

my testimony that's been provided. I do want to give some observations and talk about the role of the Attorney General's initial observations that we have. The Attorney General's role in looking at what happened in February is two fold.

One, we're the consumer advocate of Arkansas. We enforce consumer protection laws in the state of Arkansas. And there are some aspects of what happened from an economic standpoint in February, where consumer protection laws of Arkansas may have been breached. In particular, the price gauging laws that went into effect when the Governor declared a state of emergency on February the 10th. That state of emergency lasted until March the 12th.

The second aspect is the Attorney General is the rent payer advocate for Arkansas, so we represent the individual rent payers through the Arkansas Public Service Commission. We're going to look at what I think needs to be looked at. One, do we have (indiscernible) issues. We did dodge a bullet. We didn't face the same problems that Texas faced, but there's

some serious operational issues that need to be looked at. We need to do the analysis and look into why power went out for some utilities, the rolling blackouts or force outages. We need to see why Pea Ridge was lost. The town of Pea Ridge was lost for a period of time. We need to understand why companies were forced to go under their curtailment plans.

So natural gas is our additional focus, and when they Interstate Pipelines and Pipelines say that you need to reduce your consumption in a city gate, or the amount of gas you're taking into the city gate, the utility puts into effect its order of curtailment. It shops off the interruptable customers first, who know they're going to be interrupted. Then they start to work their way down through business customers, and ultimately residentials.

One of the issues that we see, and have seen early on, the focus of that has been around human needs. What happens to people? Greater consideration needs to be given to critical business facilities. In particular, in the agriculture industry. You know, there were certain facilites in the poultry industry

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that had they been forced to cut off their natural gas, could've created problems for the whole industry. And that's the issue that we're looking at, that needs to be looked at, and maybe something the task force considers going forward.

From an economic perspective, which that's another aspect that we're looking at, we're looking at that are going to be active with the proceeding before the Public Utility Commission, we're going to ask the utilities what did you do to plan for the event? have sufficient pipeline capacity and storage capacity on your contract? Did your gas supply contracts? How did you contract for gas supplies? Did you factor in the fact that at any critical event like this, there are going to be freeze-offs? Not to the extent of what we saw, but there are always freeze-offs, in incidents like this. And then how did you perform, when it looked like you were -- didn't have enough to -- maybe enough capacity or supplies throughout the event? Did you act in a timely manner, and if not, was there a cost to the consumer because of that?

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We're also looking at the price gauging aspects of it. Price gauging effectively takes away market based pricing when the Governor compares a state of emergency. The pricing becomes cost based. So merchants are allowed to charge consumers the cost -- their cost, plus a reasonable markup, plus 10 percent. The utilities are just flowing through what they paid. So if we're looking at who was supplying them, were they paid -- were they reflecting cost increases in what they charge to the natural gas utilities? And we're working our way up the supply chain, to find which market participate increased their prices not becuase of increased cost, but because of shortages in the market place, and taking advantage of that. That's where the price gauging focus will be.

One thing that we've looked -- that we've discovered in applying the price gauging loss during COVID, is often times that price gauging investigation turns into an anti-trust and market manipulation investigation. And in that regard, we are coordinating with Attorney Generals in the region. This was a regional event. This is not something that happened in

Florida. This is not something that really happened in Mississippi. It happened in (indiscernible). And so we're working with them in that regard.

I'll close out with talking about two issues I think the task force needs to consider, too. One, how do municipal utilities deal with situations like this? Investor owned utilities have some financial tools available to them, and the legislature created securitization as a tool available to them, to be able to pay these bills and not be in financial distress. We need to make sure municipal utilities have those financial tools, because they face the same problems, and they probably didn't have the same flexibility as investor owned utilities.

And the other thing is affordability for residential rate payers. And in those that are going to have a difficult time paying their bills. Sadly, the Commission put into effect a moratorium on disconnects, based on COVID and COVID — the COVID moratorium has passed, and now residential consumers are subjected to be disconnected for non-payment of their bills.

We need to have -- make sure we have financial assistance programs in place to help those people, should things like this happen. With that, I'll stop my remarks and respond to any questions that you may have.

MS. KEOGH: Well, thank you, and appreciate your presence here and your information. We appreciate the written testimony that we did receive and the clarification of your investigation. That helps make sure we don't repeat the same process that -- quite different purposes, I believe in the investigation, as the Governer is looking more at this as an after action of finding a few lessons learned and a way to improve public service to our citizens. So we appreciate that.

Is there any one recommendation that you would make that -- you just made several, but is there something that as you walk away from this, you really want this task force to focus on the benefit, the work that the AG is doing, as well as the Public Service Commission is doing regarding this event?

MR. HARDER: I think -- the two things I think, of the things I discussed that are

probably most important. One is if this event happens again, how are we going to go about determining who to shut off firs, and do we have critical business facilities that need to be on? And I'm focused most on the natural gas. If the power goes out, there's general always the ability to have a backup supply. Hospitals do this all the time. They have a way to generate ground electricity should the power out. So I'm mostly focused on natural gas.

The other piece, too, is just the municipal utilities and their ability to -- you know, there are some that had rainy day funds, or other funds set aside to pay the bills, but there were a lot to do. And so making sure that municipal utilities have tools readily available to them, you know, so their not straggling and trying to figure out how they might pay this bill. I can't put, you know, a \$5,000 March natural gas bill on a consumer in, you know, wherever, Arkansas. They need the tools.

Those are two things that I think either are very critical from our perspective. The

rest of them in turn -- the rest of it is all a who did what and who needs to pay for what, you know, and how do we go about getting the money back to the consumers, because there were over-charges? But going forward, I think those two are critical issues that need to be studied.

MS. KEOGH: Yeah. And I appreciate that.

I'll turn this over -- I'll probably go in reverse order with the members of the task force in asking these questions to you, but I will (indiscernible). Our next speaker will be MISO, in case you want to prepare. I meant to give you that warning, as we brought the Attorney General's Office up.

Do you have a question?

MR. SPARKS: I'm good. Thank you.

MS. KEOGH: Then, I'll turn to Director Bengal.

MR. BENGAL: In the interest of time, I think written testimony provides it for me.

MS. KEOGH: Anything from -- Director Pfalser, do you have a question?

MR. PFALSER: I just had one question. If the natural gas supply had not been effected by the freeze-offs back in Oklahoma and Texas, do

you believe that the AG's office would be involved in the price gauging investigation and so forth?

MR. HARDER: When the Governor declares a state of emergency, we're going to look at prices. I think the big driver -- our focus is that -- actually heard that from Chairman Thomas. I think you going to hear from a lot of people today. That was the big driver. So had freeze-offs been what they typically are in winter events, it does happen. Things above ground freeze. Things below ground freeze. Probably not as an intensive an investigation but we would've looked at the rates, but natural gas was the cause, I think of all these cost increases.

MS. KEOGH: All right. And all the information. We look forward to working in corroboration with your office.

MR. HARDER: We do, too. Thank you.

MS. KEOGH: The next speaker we would like to hear from is Mid-Continent Indpendent Systems, and I will note that Southwest Power Pool, we'll be asking you to come forward next. You'll be on standby, but if you would please

state your name, title, and organization and we look forward to your statements today. Thank you for being here.

MR. BROWN: Thanks for being here. And I applaud the Governor in this task force and being Proactive in terms of thinking of next steps to avoid some of the issues we had this time. My name is Daryl Brown. On the executive director for MISO to south region's external affairs. I've only been at MISO for about a year. So prior to MISO I worked at Southern Company, GE, and Hitachi. So I have a lot of experience with fortunate, or unfortunate, provided by major events such as this storm.

What I wanted to point to first -- she's going to hand you out a document. This actually just came out yetterday, and you'll see that it's a February arctic event. It basically steps you through everything that happened in terms of the event details, the lessons learned, and then something that is very important to some of things that Chairman Thomas was mentioning in terms of the liability. That's what we call our reliability

imparative. You'll see us having after that.

That's the light paper that was written some time ago. And then you'll also see our MISO opps procedures. A lot of things that were taking place were questions when it came to us calling a low shed. This steps you through and this will be supplied to our market participants, or vendors, as well as our regulators as the events are taking place. So that's what's contained in here.

There's also some lesson learned. I think they begin on page 25 that you'll find very handy on this topic. This is a summary of lessons learned from that. So with that, you know, Chairman Thomas covered the weather, so I won't remind you of the things that happened, but one thing I will point out though is -- is that it was the most extreme weather event in the last 30 years. So this wasn't a normal situation.

(Indiscernible) overall event was successful for us, in terms of facing extreme conditions. It is also highlighted on impact, that they increase in extreme weather events that was changing the resource (indiscernible)

operators ability to maintain their liability. That points back to the liability carrier.

So we published this report, which you have here, just yesterday and it gives, like I said, an account of the details and lessons learned, and the implications of the liability carrier. The approach that served the reason well, I think, in the past, must be adapted to address the liability challenges that we face today. We're preparing, the region for a feature with a different risk profile, as more and more renewal (indiscernible) takes place. And we are thinking that there will continue to be increased extreme weather events.

The reliability imparative addresses the enhancements needed for planning, markets, operations, as well as the systems changes that's needed. These changes that are necessary to tackle how well maintained reliability has MISO reached (indiscernible) takes place.

The lessons learned are five kind of key take-aways as you'll see in there. One is generation performance. The generation performance is always critical when we need

sufficient generation, as Chairman Thomas pointed out, to be available at the right times to meet the demand. Winterization to protect generation fuel supplies or extreme weather conditions in mitigating the risk, MISO and its members must assess and establish service area criteria. To date, there's really not standard, when we talk about that from (indiscernible) perspective. We do surveys, but those surveys are more suggestions and thus for piling information in terms of best practices and sharing (indiscernible), but there's not a standard in terms of weatherization.

The next one is resource advocacy planning that needs to be refined. Changing from an annual to a seasonal resource advocacy construct without addressing increasing frequency if heat remains throughout the year. We used to just simply look at a summer peak event, but that's changed. During this winter event, we actually approached in some cases as high as certain periods exceeding the peak event that you would see in the summer. Sometimes it was really close to all time peak.

The next one is transmission. Transmission is vital to moving electricity from where it's generated to where it's needed most. Adequate electricity was available across the MISO region, during our transmission constraints. I heeded the ability to move in to each of the specific areas where it was mostly improved in a regional coordination interconnection, along with (indiscernible) will bring significant benefits to facility the reliability and (indiscernible).

The fourth thing is operations of the future. Our operators that are in the control room are very seasoned veterans. They have great tools, but as, you know, more renewables enter the mix, in terms of buildings, they're going to have to improve those tools and improventional vitals operations. The relevant details will be critical.

Last it's the reliability. And I've counted many years of forward looking planning and decisions. I want all of our stakeholders is what's taken place in the (indiscernible). That will conclude my opening remarks and I'm prepared to answer any questions that you have.

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MS. KEOGH: Again, thank you for this, and thank you for this appropriately typed report. We appreciate that. We appreciate it being hot off the press and look forward to reading the recommendations as well as your lessons learned. I guess the question that comes to mind, I've had (indiscernible) through your testimony you've provided a significant and limited amount of information and it helps to educate us all. You mentioned the transmission aspect of it, that's kind of what intrigued me, and some others that perhaps a prior testimony talked about, good potential gap, as we are started by two regional transmission authorities, (indiscernible). Have you identified a similar gap that some people reference and is your recommendation to addressed that in a different fashion going forward, or is -- I guess I could just appreciate (indiscernible) and maybe I like the same thing of Southwest Power Pool, if there is something that can be done. As I understand it, it was quite a bit of energy, and effort to make sure fuel was brought across to those that had needs during the respondent event, outside

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of the norm, and I appreciate what they did in that respect. I just want you to speak to that reference gap that I've heard of.

MR. BROWN: Yeah. Unlike what happened in (indicernible), right, we're growing connected, so we call it Neighbor Seven Neighbor's Rights, so we have the ability to actually blow power across the different RTA equipped plants throughout the eastern interconnection. terms of your transmission question, we do what we call a (indiscernible) transmission plan. There's features one, two and three. Look at that. In that reliability imparative document, which is the third document that you see in your package, it actually outlines our recommendations, in terms of what needs to take place to fill those gaps as you called it, but that requires a lot of discussions between the different -- because we're talking about 15 seconds, right? They have different plans, and then you're talking about the costs of those things. Who's going to pay for it, as we build these assets.

So that is the key. When you talk about an RTO, remember we don't own any of these assets,

right. We're more like the air traffic controller of these assets. So what we're doing is compiling information and the input from our stakeholders to talk about what's needed and why. And getting the buy-in from (indiscernible) in terms of (indiscernible).

MS. KEOGH: All right. Thank you. Director Pfalser, I'll let you offer any questions you have for MISO.

MR. PFALSER: Mr. Brown, if there's a new entity power plant, the generation plant that's being built, do you all have -- does MISO have any inputs over what type of generation -- fuel their using to generate?

MR. BROWN: Yeah. So that decision is being made, you know, by the state. That is not -- we're tasked more so with managing what assets are available.

MR. PFALSER: Are available, okay.

MR. BROWN: Correct. And so we're not tasked with deciding. We don't have that authority.

MR. PFALSER: Okay. And you don't decide who can be at the (indiscernible) or not?

MR. BROWN: Well, we decided from a market's

perspective, like as an RTO, we're -- you know, our goal is to ensure that customers -- we're operating that in the lowest possible costs.

So as Chairman Thomas pointed out earlier, we're going to, you know, issue the guidance, in terms of who's generator facility is running first, based on the cost. So we're going to go for the least cost (indiscernible) to meet the demand for that day.

MR. PFALSER: Okay. And the last I have is can you give me an example of a renewal energy source that is not intermittent?

MR. BROWN: All of them are intermittent, because you're talking about -- are you talking about solar, or are you talking about wind? That's the key, so I cannot say a renewal source at this time -- the only way that I -- I know there's some work that's taken place. And there's some efforts that are taking place currently (indiscernible), but that is the only member of (indiscernible) looking at the renovation perspective. And I can speak to details of that, but that is one of our (indiscernible).

MR. PFALSER: Thank you.

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MR. BROWN: You're welcome.

MS. KEOGH: Director Bengel?

MR. BENGAL: Probably one of the sources of (indiscernible) would be natural gas, or electricity breakdown (indiscernible). Quick question: When you looked at the -- on page 12 of your testimony, you talked about considering formalizing (indiscernible) expanding the (indiscernible) illicited testimony for the aging community. We've had a lot of communication back and forth, which seemed to work very well. What kind of formalizing are you referring to doing, beyond what you do now?

MR. BROWN: Yeah. So we communicate on a regular basis. We communicate to our neighbors, STP, as well as our members on a regular basis throughout the -- you know, we had practice and renew, some readiness drills and workshops saying winter. So there's a lot of communication that takes place, but what I think needs to take place, and I'm sure (indiscernible) others, based on my experience with Georgia Power, they're having conversations about those critical assets and, you know, hospitals and things of that nature,

and clearing the roads in certain areas, just to make sure that fuel could be delivered, in terms of (indiscernible) diesel. But that ad hoc meeting was more so who was having the issue at that time. We all got on the call and thanks to Chairman Thomas for helping me pull that together that day, to just talk through where we were seeing issues from all of our members. How could they assist? And so I think expanding what happened that day with the state troopers that were helping to guide Mayor Scott that was using some of the equipment that City of Little Rock provided to actual clear for those critical assets.

Just those kind of conversations, rather than doing it on the spot that we actually started doing more quarterly meetings, or semiannual meetings, such as will be due with our summer (indiscernible) and workshops that it be more private -- public partnerships in that discussion. Basically, this task force, plus us, in terms of our plans.

MR. BENGAL: But that would be something that would come from a state agency like PSE or the industry do that together? What would be

the best focal point to formalize that?

MR. BROWN: I definitely think

(indiscernible) is the right place to start.

mean, Chairman Thomas, I made the call to him,

saying "Hey, here's a thought I had," and

really he had the relationships, me being

fairly new to there, seeing how I pulled that

all together. It was effective and

(indiscernible) that probably wouldn't have

been able to do that, if it wasn't for that

conference call.

MR. BENGAL: Just one more. What's the mix of fuel or energy sources in detail?

MR. BROWN: I hate I left my phone back. I could tell you what it is, at this moment. We have an app, right. It's a MISO app. If you were to look at that MISO app, it'll show you our fuel mix at any minute, right, of what's taking place. So what I would tell you is where is the -- you know, when you talk about communication, most of our members now have apps, as well as us, to ask any question of what is it at any particular time, so that notifications that we were actually sending via test message or email, depending on the

regulators and how they told us they wanted us to communicate to them. That app now will probably answer 90 percent of the questions, and we'll keep enhancing that as we go forward.

MR. BENGAL: And in the beginning of your testimony, you said this was only a second time you had to have a load shed event --

MR. BROWN: That's right.

MR. BENGAL: -- in your area. Is that because of the mix of energy you have, or was that for gas as the component in your area, as opposed to request?

MR. BROWN: I think it's just the fact of, you know, what an RTO is, right. We're able to leverage, you know, energy from other locations. PJM for instance, right, we've got at least 13,000 mega watts on a particular day that flowed from north to south. So, you know, sometimes (indiscernible). So the fact that we're interconnected is really the key thing in my opinion, to being successful at keeping the reliability where it is today.

MR. BENGAL: And if you look at the (indiscernible) one time hopefully event, but you said it compared to potential summer

events.

MR. BROWN: Yeah, in terms of peak loads, right. So you know, we actually have another (indiscernible). I didn't include that one, on (indiscernible). As more, you know, units are more electric than they are gas, right, that's going to command -- that's going to increase demand. Same way when it comes to the electrication of vehicles, seeing more and more electric cars versus gas. Those are -- those are going to keep increasing and so that's a forward looking report, electrication report, and so --

MR. BENGAL: So we've got a lot more winter type events in the future, if we have (indiscernible) long periods of high temperatures, may result in the same type of event that we (indiscernible) energy usage.

MR. BROWN: Yeah. I mean, every event is unique, right, but when you look at the overall demand, the more demand, the bigger the risk in terms of those peaks and being able to meet those demands. The planning that Chairman Thomas referred to earlier, when you're building one of these facilities, it's not like

you can say, "Hey, looks like we need more generation." You know, you can't do that in a matter of a year. We're talking about, you know, four to five years to build the land, once it's pruned and on to that process. So the process of making a committment of that nature and then digging through the cost and the benefits of that, for an everyday rate payer, that's a lot to consider. So those are questions that are separated and discussed everyday.

MR. BENGAL: Thank you.

MS. KEOGH: Thank you. All right. Well, again thank you so much. We have a pretty diverse mix today. I won't announce it, because I don't want to (indiscernible), but I'll tell you -- yeah, thank you so much.

MR. BROWN: Absolutely.

MS. KEOGH: Appreciate that. And thank you, as far as your communications and in communications and preparation. One of the benefits of transformation, under Governor Hutchinson's leadership was to bring our energy group, or executive agencies together and I know my (indiscernible) down the road, so let

us know how we can assist you, as well going forward in addition to your Public Service Commission and your interactions.

MR. BROWN: Thank you.

MS. KEOGH: I will now ask Southwest Power Pool representative to come forward, state your name and organization. After that, we'll take a break and call -- I think we'll hear about the energy users, the four organizations we'll talk about as the consumer side of the energy sector.

MR. SUSKIE: Well, thank you. My name is Paul Suskie. I serve as the Executive Vice President and General Counsel for Southwest Power Pool. I've been here a decade now, and before that, I spent four years as Chairman of the Arkansas Public Service Commission, predecessor of Chairman Thomas. And before that, it's good to be home in many ways, I was the City Attorney for the City of North Little Rock for 10 years, when we ran the largest electric municipal utility in the state of Arkansas.

So collectively, I have about 24 years experience dealing with electric utility

regulation and operations in some form or fashion. I appreciate the opportunity of the task force to come and speak about the Feburary 2021 winter weather event. I applaud Governor Hutchinson's leadership in creating this task force to take a look at this historic and challenging event. As we all know, and it's been refernced ealrier, this was a historic event. From a weather persepctive, some have referred to this as the 100-year storm.

The cold temperatures meant that well over 90 percent of our footprint was below zero degrees. I didn't say below zero. I said below zero degrees. This includes parts of our nation that is Texas, Louisiana and New Mexico that normally doesn't see these tempertures, let alone for several days in a row. The emphasis here is SPP has been in existence, an Arkansas organization, for 80 years. This is the first time, in the 80 years -- we were formed shortly after World War II began. We've never seen a load event, particularly of this magnitude, region wide. And also though this may be a first for the SPP region, this is not a first for this nation.

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In 2011 Texas saw a major polar vortex in its state. In 2014, the east cost experienced one with the 2014 polar vortex. And then here in Arkansas, south central US, in January 2018, we saw a cold weather event. Due to the historic nature of this and the incredible implications its hard, it's a real opportunity to have lessons learned.

To get to some of the activities of what SPP has underway, two months from today our board of directors will be presented a comprehensive report of the winter weather event. This report is composed of reports from five different teams. These include stakeholders, our market monitor, our staff, as well as the Regional Safe Committee. Regional Safe Committee is a committee that has governing authority in our governnce process. It composes a one state regulator from each I'm proud of the service Chairman Ted Thomas has on this organization, as he is a member of this committee. Obviously, I echoed your comments that we need to listen to Ted Thomas, particularly what he's talking about with these challenges.

In addition to what we're doing internally, on the lessons learned, we are also involved in a feud with the Federal Energy Regulatory

Commission, primarily enforcement agency of the federal government and enforce the standards of the bulk electric system. And they're doing their inquiry in concert with the North

American Electrical Liability Corporation, that enforces those regulations.

At a high level, I'm going to talk about the event and SPP's role is operating the electric for that. First of all, RTO's do not run generation and do not flue transmission.

Matter of fact, because we are the grid operators we're prohibited from doing that. As an RTO, we operate a grid under a number of functions. These are highly regulated functions by Merk and Burk. I'll just talk about four of them.

One, is we are a transmission planner. In that role, we plan for the transmission grid of the future, wheher it's for liability reasons for economic reasons. We're a market operator. As Daryl discussed we -- and Ted Thomas discussed we administer wholesale electrical

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markets, where we deliver power reliably at the lowest cost to in use customers. And these roles are regulated by federal (indiscernible).

We're also the reliability coordinator, where we ensure that the reliability of the bulk electric system is maintained, whether it's a small event from a line goes out to a lightening strike, to a tornado, or it's an event like we had in February. And the last of the order y'all are talking about is what was really important to this event is (indiscernible). Does the (indiscernible) authority, what your job is to balance load, that's the demand of customers with generation of the system. If you have too much load, or too much generation, you can have lags. If you have too little generation and you don't do something about it, you can have blackouts. Well, that's what we faced in February.

On February 15th for the first time, we ordered one and a half percent of the load about 600 mega watts to be load shed, load ratio shared. In other words, spread throughout the foot print of 600 mega watts.

And that was for about 57 minutes. On Tuesday,

the next day, the 16th, we had two load sheds. One of 1200 mega watts and another of 1200 mega watts. Collectively, that was about 2500 mega watts and that lasted then different time increments, but two hours -- three hours and 27 minutes.

So why do we do this? We do this because if you don't load shift when you don't have enough generation, you can have cascading blackouts across the entire (indiscernible). When was the last time that happened? 2003. Because Midwest American doing a transmission line overload, doing blackouts that went to New York City and into Canada. There were parts of Canada that their power wasn't restored for seven days. So it's because of these items, is why we do what we do.

So one other thing I'd like to touch on, which was touched on by other speakers today is the price of natural gas. The price of natural gas for the last several years has been two to three dollars (indiscernible) during this event. And so while we look at how we pay for this event, there is challenges. There's a number of things to look at. The gas market,

the cost of gas, we don't regulate. We're not involved. It directly impacts our market, because in most cases, it sets the price on the market.

I appreciate the opportunity to speak and I look forward to your questions.

MS. KEOGH: Well, thank you again, for sending your information forward. I'll start with a brief question of just the same one that I asked representative of MISO. The benefit of having the two of you (indiscernible) I hear in Central Arkansas that have the two RTOs bringing the school of opportunity, but are there any (indiscernible) in terms of making sure that the (indiscernible)?

MR. SUSKIE: Yeah, aboslutely. We coordinate with MISO on a number of areas. We plan (indiscernible) I talk about. We work on scenes, projects, and we do realtime operations. This event I think really shows the need to coordinate with your neighbors. We had more of a chosen generation loss than they did, because of the cold temperatures, and we just had another gas, coal and wind that wasn't produced. And as a result, we would've been

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much more worst off, except for that up from MISO. On a big day, we'll important 2,000 mega watts from MISO. We were importing 6,000 mega watts. Realize the interconnection of the grid, as Daryl told you, they were importing at the time 14,000 for the east. So in reality, 14,000 went from PGO to MISO and then MISO was able to send six to us. We got power from Canada at one point. We got power from Colorado at one point. We were loading up, sending as much power as we could to Texas, but when we got short, and we knew it was close to shedding load, but it cut power to Texas, and we all know that the need that they were in. It's highly interprotected. We work well together and I think the (indiscernible) need to work together more so.

And I'll point out in January of 2018 when we had the cold weather event here, there were a lot of lessons learned. There was an inquiry from FIR, similiar to the inquiry now about how can SPP and MISO coordinate. I think a lot of good recommendations came out of that. We implemented and they showed that they work through this event.

MS. KEOGH: Okay. Thank you. I will turn to Director Sparks?

MR. SPARKS: No questions. Good information. Thank you.

MS. KEOGH: Thank you. And now I'll go back to Director Bengal. Do you have a question?

MR. BENGAL: Just a quick question. The power that you purchased from other systems, what was the generating source of that power?

MR. SUSKIE: And I'll say in reality when you're buying electricity in that volume, you don't know what -- it depends on what they have on their system, in reality. That's a good question, but it's whatever power they have on the system.

MR. BENGAL: And with respect to natural gas, without natural gas disruption and we have say a long heat wave, summer event, you're -- how much capacity I guess is this and will that ever be an issue in the current (indiscernible), or would it become an issue, if you change the mix that we have now?

MR. SUSKIE: I'll start out by sharing our fuel mix. I might be off by maybe one or 2,000 mega watts, but our number one fuel capacity

source is gas and about 35,000 mega watts.

Next is wind at about 27,000 mega watts, and next is coal is about 23,000 mega watts. Does that help understand the importance of gas, and the need to have gas. Of those wind actually produce, roughly, as we estimated that it would. Coal produced about 75 percent of what we accredited for, and gas was below 50 percent. Whether the pipes were all fine breaking, or they just physically couldn't get the gas, or in some cases, they couldn't financially afford the gas. I know members that had to go to the banks and get loans, just to buy gas for the market, and when they went back, the gas was gone.

MR. BENGAL: Thank you.

MS. KEOGH: Mr. Pfalser, do you have a question?

MR. PFALSER: The question is concerning the comment that you made about -- correct me. They dictate that (indiscernible) by who generates electricity first? The cheapest?

MR. SUSKIE: Yeah. First of all, first sets the rules for the markets. They inherit market rules since you dispatch the cheapest energy

first, and then you go up the --

MR. PFALSER: So the cheapest generation is going to be what you use the most of, until it can't produce anymore, and then you go to the next one and so forth and so on. So looking at the future, and this is almost incompatible. If the cheapest is going to be wind power, and that is what they ask that you do, then you can let one and two provide power (indiscernible) because they're going to be the first selected, it would appear. And that doesn't seem like a real good answer for a base load. Is that fair?

MR. SUSKIE: Yeah, but I would say I look at it different. Without market, you're going to dispatch cheapest first. It just makes sense. As a regulator, you're going to dispatch them cheapest generation first. But as Ted has pointed out, wind with the federal subsidy is it actually bids in the negative prices in the market, and so as a result, it's driven down market prices. And therefore, if you are not going to (indiscernible), meaning you have a state regulator that approves generation. They put in new rates and rate payers pay for it.

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Vertically integrated utility has to bring up capacity and then they got to figure out what the right mix is.

But if you're (indiscernible) they have the vertical integration. They deregulate it. They don't have a capacity mark. It's truly freedoms of the market, and their prices got slowed -- so low, they had no new generation that they needed for this situation. Arkansas is better protected than actually the entire SPP footprint is, because we're a vertically integrated state. And it does create a challenge, if we continue to move to renewals. The continueds have low prices and if you have a retirement of gas and coal plants, there's going to the challenges that you can't figure out. Part of the potential solutions batteries, but is still has It's intermittent problems , because we assume they only last about four hours, until they get a recharge.

MS. KEOGH: well, thank you again for your appearance, and bringing your presenation and testimony. I would like to take a moment to recognize Calay Stanton, who is here from

Governor Asa Hutchinson's office, supporting the task force. Thank you for your role in this process.

I know we have a number of other asteamed guests, including former congressmen, (indiscernible), so appreciate those of you that have been here today, and we will take a break for the purposes of the task force to give a moment. And then we'll reconvene to start the second round of speakers. So with that, we'll take a break and we'll reconvene at 3:00. Thank you so much.

(OFF THE RECORD)

(ON THE RECORD)

MS. KEOGH: It is May 27, 2021 and we appreciate all of you that are here in person, but also those joining us virtually and watching live stream. Those of us in person are here at the Arkansas Department of Energy Environment Headquarters Building here in North Little Rock and we're here to hear testimony for the Energy Resources Planning Task Force. I am Becky Keogh. I'm the Secretary for the Arkansas Department of Energy Environments and I got the pleasure of serving this task force,

along with Secretary of Commerce, Mike Preston, Director of the Oil and Gas Commission, Larry Bengal and Kevin Pfalser, Director of the Little Rock Petroleum Gas Board. Today, we have with us Keith Sparks, Director Sparks, who is sitting the place of Secretary of Commerce, Mike Preston today. So we appreciate you being here today. The Secretary of Commerce could not be here due to out of state travel, but Steve Sparks is here. He is the Director of ADEC, Existing Business Resources Division.

On March 3, 2021 Governor Hutchinson signed Executive Order 2105 to establish the Energy Resources Planning Task Force. The purpose of this hearing is, incompliance with the order, to gather information from testimony in order to better prepare our state's energy infracture in the event of another statewide emergency. And that statewide emergency could be another storm event, but it also could be something different, so we want to make sure that we're considering all possibilities.

As chair of the task force today, I wanted to first extend my appreciation to those of you that are speaking to us or offering testimony.

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Those of you that are in this session, we just completed the first session which comprised a number of the regulatory agencies, the AG's Office, as well as several other bodies, our regional transition organizations. But as we move into this next session, we'll be hearing from several organizations, regarding energy use and how you were effected during the February storm, and perhaps some recommendations that you might have.

Anyway, so I will call the name of the organization that will provide the testimony. When I call your organization's name please -if the representative that's here to speak today, will come forward and sit at the mic. Make sure the mic is turned on. There's a bright green light when it's on. State your name, title, and organization for the record. We ask that the organization limit its testimony/presentation to five minutes. you have multiple speakers, I would ask you to share that time, if possible. And then after you complete your opening statements, I will then open the floor to the task force members to ask questions of each of those that are

speaking. We've only alloted about 15 minutes for that Q and A, so I'll ask our task force members, as well as you and you response to keep mindful of the time, during those questions and if we need more detail, after a short response, we might want to follow up with you later, but please work with us on that if you can.

I'm happy to introduce Andrea Hopkins, who is sitting here at the front table. She is our timekeeper for the hearing and is doing a well job and allow us to catch back up. So please be respectful of the time limits that we offered you and that's only in respect of getting as much information as we can shared today, but also respectful of those others that are here to speak, and those that might have things to say.

I recognized earlier that we have visitors that are here with us. We have representatives of the Governor's Office. I appreciate that. Chairman Thomas has stuck around, so I appreciate that. Chairman Thomas spoke earlier from the Public Service Commission, and I know he -- they have their own assessment or

evaluation going on, appropriately through the regulatory process, as well as the attorney general who spoke about that earlier. Their represenatives spoke about their own investigation, which has a bit different focus. The Governor's focus in this process is really about an after action assessment. Really, looking at lessons learned and how do we improve. So with that, we will try to keep our questions directed at that focus.

The first speaker we're asking to come forward is the representative from Arkansas Environmental Federation. And I will give you a heads up that the next speaker after this will be the Arkansas Electric Energy Consumers, so to better prepare the order. So with that, I'll turn the mic over to Ava and let her introduce herself.

MS. ROBERTS: I am Ava Roberts. The Executive Director of the Arkansas Environmental Federation. The AEF was founded in 1967 by industry members and the Arkansas State Chamber who saw a need for industry representation, concerning environmental regulation. We at AEF greatly appreciate the

opportunity to participate in the Energy
Resources Planning Task Force and thank the
committee members and participants here today.

The questions that AEF received April 12, 2021 was circulated to members for a response. Member response was varied greatly, depending on company size and industry. The answers we received represent less than five percent of AEF member companies. AEF members that responded to our questionnaire filled the need for earlier and more detailed (indicernible) before facilities are asked to cartell operations.

The majority of AEF members that answered our questions said the curtellment during the load shed did not damage or reduce the effect of this environmental quality control equipment; however, those that did answer yes believed adequate notice and minimum utilities requirements are needed to mitigate equipment damage.

There were significant challenges to allocate energy resources, during these extreme events and the responses to this questionnaire stressed the need for earlier notification for

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internal planning. As the majority of AEF membership are manufacturers, there's no opportunity to negotiate processes with end users. AEF members have no suggestions for other entities to provide testimony before this task force. I appreciate your time today and will be glad to take any questions you may have.

MS. KEOGH: Thank you. I appreciate you being here. I appreciate the membership responding. I understand that you do represent a wide diverse group that may have different interest or even different experiences, during the February storm event, so thank you for that. And we appreciate the recommendations that have come forward. And that was one of the things that I heard, and the Governor heard, I know, was about early notice, and about even rolling blackouts we had. But also the notification process for natural gas curtailment, which was more, I quess, affected by your customer -- or your members. Is there any recommendations in the feedback, that they're giving, in terms of what the notification could, or should look like, except

early and more often? Is there any more specifics that they would like to see either via technology or via timeframes or anything like that, that we can offer the Governor on report?

MS. ROBERTS: The list that responded did not go into that type of detail in their responses, but that is something that I will be happy to address with them.

MS. KEOGH: Well, thank you so much.

Appreciate that. I think that will be helpful to me, anyway (indiscernible). So with that,

I'm going to turn the mic over to Director

Pfalser to see if he has any questions for you.

MR. PFALSER: Ms. Roberts, again, thank you for providing what you did and being here today. You all -- your organization helps your membership navigate the environmental regulation for the most part. Is that why you all exist?

MS. ROBERTS: That's right.

MR. PFALSER: Okay. And do you know -- do you have a feel your membership, if anybody has the ability for generating electricity on their own? If there was load shed and were taken

offline, would they have the ability to continue to generate their own electricity?

MS. ROBERTS: I did not receive that
specific information --

MR. PFALSER: So you're not aware of --

MS. ROBERTS: -- with regard to that. I'm not aware of that, but again if that's the will of the task force for me to, I will be happy to bring that to our members.

MR. PFALSER: I would be helpful, maybe, just to know if that is -- if there's anybody out there that's doing that, and to talk about the whole equation.

MS. ROBERTS: Absolutely.

MR. PFALSER: That's all I have.

MS. KEOGH: All right. Thank you, Director Pfalser. I'll turn to Director Larry Bengal and see if he has any questions.

MR. BENGAL: Thank you. In the interest -I know it was a small (indiscernible) companies
that you represented. Was there a difference
between the (indiscernible) issue, with respect
to electricity versus natural gas? MISO and
SPP have fairly robust notice systems, so it
should've been that variety, but I'm not sure

with the natural gas industry has

(indiscernible). We will probably hear some

testimony on that, but did you see a difference

between electricity notice and natural gas shut

off notice, in your responses?

MS. ROBERTS: In the responses, I did not. They did not differientiate.

MR. BENGAL: Is there any way to surmise what they were talking about in the answers they gave you?

MS. ROBERTS: For the most part, the answers were very brief.

MR. BENGAL: Okay. That's all I have.

MS. KEOGH: And to that, Director, I want to let everyone know that the Department was contacted as well as, I believe, the Governor's Office regarding some -- from some (indiscernible) sites, regarding natural gas curtailment. I think it would be helpful to pursue if their concerns really were regarding the fuel supply, or if it was more around the electric cred, that would also help us, too.

How about you, Director Sparks? Do you have something?

MR. SPARKS: Very quick question. What size

membershop do you guys have?

MS. ROBERTS: We represent roughlly 200 companies.

MR. SPARKS: Thank you.

MS. KEOGH: Wel, if the task force does not have anymore questions, I think we will close with this one. We appreciate your willingness to be here and your followup, and feel free to reach back out, if you have any information you want to share with us. Thank you.

Our next speaker is Arkansas Electric
Energy Consumers. They are heading to the
table, so thank you for that. Please be on
standby. The next group will be Arkansas
Forest and Paper will be the next speaker
coming forward, so if you would like to start,
I'll let you state your name, title, and
organization.

MR. COUSINS: All right. May name is Steve Cousins. I'm the executive director of the Arkansas Gas Consumers and the Arkansas Electric Energy Consumers. I'm a licensed professional engineer in the state of Arkansas and have several decades of experience running an oil refining complex in south Arkansas, that

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was one of the largest electricity consumers in the state, and one of the largest natural gas consumers in the state. And one of the largest liquefied petroleum gas producers in the state.

MR. MCMURRAY: And I'm shown McMurray.

Outside counsel for AEC and ADC.

MR. COUSINS: This event was really kind of a tale of two cities. Electric consumers, large investors and agricultural consumers. I'm not aware of a single one in the state that suffered a curtailment or an interruption, other than people that were intentionally on interruptible contracts. On the natural gas side, there was widespread curtailment. A lot of near misses, in terms of damages to equipment, or loss of poultry, and things of that nature.

One of the big reasons for that, is that Arkansas -- and our customers are Entergy customers, the largest utility -- can elect to be on interruptible tariff. And if there situation, if their business is designed in a way that they can pull the plug on operations very quickly, they can get a heafty discount on electricity costs that they pay, and because

that was available, all of those customers, were curtailed, and that took a significant amount of load off the system, which helped prevent any kind of groundouts, or blackouts, but that kind of system doesn't exist in the same way on the natural gas side, and it will be very difficult to implement.

We think that the tariff is very important. We think it's important that it be a cost space, that it be preserved, or maybe even enhanced, because it's about the only tool that you utility has, to control the (indiscernible). The supply is diminished, and the demand has got to go down too.

On the natural gas side, most of our members, most natural gas users, that have facilities, that could be damaged by prolonged exposure to cold and freezing were not aware that there is a procedure to file a special needs, or plan protection affidavit, with the enable, the transporter that provides

Centerpoint its gas, to preserve a minimal amount of natural gas, to protect equipment and lives, by not letting the facility be damaged, and what could be damaged by cold-weather.

There was no real education on that and since we hadn't had an event like this in over 30 years, many industrial and agricultural customers, simply didn't have that in place. We tried it. And once the event starts, we really don't have time to file the affidavit. So we think there is a need for education, among natural gas customers. There is a way to move up on the pecking order, for an industrial facility or an agricultural one, if you do the paperwork in advance.

We also think, that is very important that curtailments be notified as soon as possible, and we haven't heard instances of people showing up the day of the facility, with a high branch and saying, turning you off right now. And that hardly gives people time to prepare. While you're serious on the natural gas side, which the AG's office already testified about, was that there are many customers that buy gas on a spot market price basis. The system is pretty complex. You got the natural gas producer, the schedulers, the managers. You got the federally regulated pipeline, and then you got the state regulated local distribution

system, and the price is being set at the producer end, and it's got to go through this chain of people. Many people thought they were paying three dollars a million BPs for gas, and they were paying 300. So they made a run out of almost a whole year's worth of bills in just a day or two. And had they known, they certainly would've shut the facility down, and avoided that cost. It's very much the same system that some of the cities have, municipalities. So some kind of real-time crisis (indiscernible) would be very important, to avoid the serious and common consequences that exist. I that concludes...

MS. KEOGH: Thank you. Sean, did you have anything you'd like to bring?

MR. MCMURRY: No, thank you. I think Steve covered it.

MS. KEOGH: Okay. Great. Those are excellent observations, consistent with what we hear at the Department, in terms of stories that were being brought to us during the event as well as after. And also some interesting recommendations. I think those are very thoughtful and appreciate. That will help us

in our report.

One of the questions I was going to earlier pose to you was in the affidvit of process, you know, was is the -- is there an education process in existence, and is there a need to have some required notification process, do you believe from a (indiscernible) standpoint, or just a more market for our industry practice, that you would like to see a best practice implemented?

MR. COUSINS: On the elective side, the tariff has notification requirements spelled out, and we believe the utilities all follow those procedures, you know, as far as we know, 100 percent. So it's hard to complain without about interruptable customers in the manner in which they were curtailed. They signed on for that intentionally.

On the natural gas side, the special-needs waiver is in the tariff, but not the many people were aware of it. Natural gas supplies in Arkansas have been pretty robust over the years, even through the varied events. This is just kind of unforseen and maybe it's the way of the future. I don't think there's anything

in the tariff that talks about particularly sets notifications, and pre-advance warning times, or anything of that nature.

MS. KEOGH: Yeah, I'm more of a state facility, that actually experienced what you described, where the gas company shut off the gas to that facility. So it wasn't just private sector; it was across the public sector, as well. So with that, I appreciate you, but I want to turn to -- I guess I'll go to you Director Sparks.

MR. MCMURRY: Chairman Keogh, I just wanted to say on the electric side, what Steve said is correct, the notification provision to the tariff right now work. And we want to make sure -- one of our invitations was to make sure that those notification provisions were met, if there's talk of changing some of the interruptable in the future proceedings. So that's one very important thing, to maintain that level.

MS. KEOGH: All right. I'll turn it over to you, Director Sparks.

MR. SPARKS: Yes, Mr. Cousins, what would you recommend that you educate folks about the

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gas side of it? That they got caught shorthanded with the knowledge of -- that (indiscernible) happened, and the price change from consumer to producer on that?

MR. COUSINS: I think that's the situation right -- I recognize the problem. I don't know what the solution is. I would assume it could -- I'm not really sure what regulates the actual purchase of the gas from a well head producer. That's not in the tariff. That's a private contract between the end user and that producer. I suppose statutorily, you could have a requirement that that be included in the contract and some notification, but I think now, people are a lot wiser and they're going to build that into the private contracts. And I'm not sure if regulatory vagueness would solve that. And it's interstate most cases. Most of that gas is coming from outside of Arkansas.

MR. COUSINS: Thank you.

MS. KEOGH: Director Bengal, did you have a question?

MR. BENGAL: A couple of things. You talked about discussions to change some of the

interruptible notices. Who brings on -- how are those discussions, occurring through the state elections?

MR. COUSINS: Those tariffs are in the utility tariffs regulated by the Public Service Commission.

MR. BENGAL: Okay. So those are in-state discussions?

MR. COUSINS: Those would be in-state discussions on the electric side, yes.

MR. BENGAL: And the special-needs waiver, is that filed with the distribution company, or the gas transmission --

MR. COUSINS: I believe that's filed with --

MR. BENGAL: With the pipeline?

MR. COUSINS: The interstate pipeline that's regulated by ARC. And if that has been filed then Centerpoint will recognize that.

MR. BENGAL: So you would have to know as a user, which transmission line --

MR. COUSINS: Yeah, the large industrials typically rent space on Centerpoint, and then that enables whoever their interstate pipeline is. They pay only for transmission. It's already been deregulated, as opposed to

electric.

MR. BENGAL: This means to file your waiver, you have to file it with --

MR. COUSINS: So any individual customer will have a contract with enable, through Centerpoint, and some customers are directly on enable, and don't even utilize it.

MR. BENGAL: You know, gas prices are probably one of the most complex pricing structures that mankind has ever acknowledged. If you can figure it out, you'll make \$1 million. But given that, what would be the mechanism to think a user able to find when that price he was paying changed between Thursday and the next week?

MR. COUSINS: I think it would just have to be a written contract with the producing company you're buying from, that they -- that you have a way to access the spot price that they're charging you, in any particular event.

MR. BENGAL: So there should be a notice from --

MR. COUSINS: And many customers don't buy a spot. Many customers -- I know in my own experience, we bought gas that was based on the

future's prices, and could buy it ahead of time, and it couldn't take off on you. In a situation like this, I'm sure suppliers would enforce and not be bound to that price, if they didn't have any gas to deliver.

MR. BENGAL: So it would be contractual notice?

MR. COUSINS: It would be contractual.

MR. BENGAL: Not a regulatory requirement?

MR. COUSINS: No. And usually those spot prices are publicly available on, you know, (indiscernible) that there indexes that track that price, all the time, and then some form you'll agree that, is what applies to -- in the case to the people that got bit by this in Arkansas. I don't have enough knowledge to know how they're pricing them, just that they were not filing, because it generally wasn't their --

MR. BENGAL: So in the contract, they would have instead of (indiscernible) it would be in the contract that Centerpoint would tell them, hey, we're now shipping from three dollar gas to thousand dollar gas?

MR. COUSINS: Yeah.

MR. BENGAL: And I assume there's -- other than being contractual from the interruptable aspect, it's harder to use that for gas.

MR. COUSINS: It is. A lot of when you get pipeline (indiscernible) or you elect a certain number of a million BTUs worth in that pipeline you can get it at firm delivery and you can get interruptable on top of that, but this case it wasn't a problem with the pipeline. The problem it was no gas in the pipeline. So that kind of mechanism -- the mechanisms that's there and handle pipeline capacity now, just to prevent over-filling the pipe. It doensn't really address what happens if there's no gas to go in.

MR. BENGAL: And one last thing. Do you have any -- I'm not sure you would, but do you have any feel for how decisions were made on who got their gas shut off and who didn't?

MR. COUSINS: No, I do not.

MR. BENGAL: That's all.

MS. KEOGH: Well, thank you very much.

Well, thank you. I will ask you one more
question. Since he represents the

(indiscernible) industry, are there industrial

customers or consumers that y'all represent
that were affected by any kind of propane
shortage in this, or any liquified petroleum
shortages? I know we experienced some of that
in certain regions of the state.

MR. COUSINS: I don't know. I think probably the biggest single problem would be truck traffic was hampered so bad by the icy roads. You know, if you used up LPG you had in your tank, it might be very hard to get somebody back up there to resupply it. I do not know if there was a problem on the supply end, from providers of natural gas companies that sell LPG.

MS. KEOGH: Yeah. I talked to one propane dealer, one of our state senators who mentioned that he was on the road daily, during the event making sure that his customers got delivery. So with that, thank you, again for your time.

(WHEREUPON, the proceedings were concluded in this matter at 4:12 p.m.)

CERTIFICATE

STATE OF ARKANSAS)
) ss
COUNTY OF PULASKI)

I, Tiffanie N. Harrison, CCR, Certified Stenomask Reporter before whom the foregoing testimony was taken, do hereby certify that the witness was duly sworn by me; that the testimony of said witness was taken by me and was thereafter reduced to typewritten form under my supervision; that the deposition is a true and correct record of the testimony given by said witness; that I am neither counsel for, related to, nor employed by the parties to the action in which this deposition was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially interested in the outcome of this action.

I FURTHER CERTIFY, that I have no contract with the parties within this action that affects or has a substantial tendency to affect impartiality, that requires me to relinquish control of an original deposition transcript or copies of the transcript before it is certified and delivered to the custodial attorney, or that requires me to provide any service not made available to all parties to the action.

WITNESS MY HAND AND SEAL this 2nd day of July, 2021.

HILLIAS SUPA

TIFFANIE N. HARRISON

Arkansas State Supreme Court Certified Court Reporter #75

ENERGY RESOURCES PLANNING TASK FORCE

PUBLIC HEARING AGENDA

TUESDAY, JUNE 1, 2021

10:00 a.m. - 4:30 p.m.

10:00 a.m. – Call Meeting to Order 11:30 a.m.

Public Hearing Guidelines:

- Task Force Chair will moderate
- Testimony will be limited to five minutes
- Q&A will be limited to fifteen minutes

Order of Testimony:

- 1. Black Hills Energy
 - Tom Stephens, Director Regulatory and Finance
 - Chad Kinsley, Vice President of Arkansas Operations
- 2. Centerpoint Energy
 - Miles Kenny, Vice President Gas Supply
 - Cindy Westcott, Regional Vice President of Operations
- 3. AIPRO
 - Rodney Baker, Executive Director

11:30 a.m. Recess for Lunch

Lunch will be provided for Task Force members

1:00 p.m. – **Call Meeting to Order** 2:45 p.m.

Public Hearing Guidelines:

- Task Force Chair will moderate
- Testimony will be limited to five minutes
- Q&A will be limited to fifteen minutes

Order of Testimony:

- 1. Arkansas Electric Cooperatives
 - Andrew Lachowsky, Vice President of Planning and Market Operations
- 2. Arkansas Municipal Power Association
 - Travis Matlock, City of Bentonville Electric Utility Director
 - Jason Carter, AMPA General Counsel
- 3. Empire Municipal Electric Company DBA Liberty Utilities (ZOOM)
 - Joelle Cannon, Director of Government Relations
- 4. Oklahoma Gas and Electric

- Don Rowlett, Managing Director Regulatory
- 5. Southwestern Electric Power Company (SWEPCO)
 - Bradley Hardin, State Government Affairs Manager

3:00 p.m. – 4:30 p.m.

Call Meeting to Order

Public Hearing Guidelines:

- Task Force Chair will moderate
- Testimony will be limited to five minutes
- Q&A will be limited to fifteen minutes

Order of Testimony:

- 1. Entergy
 - Laura Landreaux, President and CEO
 - John Bethel, Director of Public Affairs
- 2. Energy Policy Network
 - Randy Eminger, Executive Director
- 3. Jackson Walker
 - Michael Nasi, Partner
- 4. PPGMR, LLC
 - John Pieserich, Attorney

ENERGY RESOURCES PLANNING TASK FORCE

MINUTES

DETAILS

Date and Time: 6/1/21 Session 1: 10 - 11:30,

Session 2: 1 - 2:30, Session 3: 3 - 4:30

Lawrence Bengal, Oil and Gas

Commission Director, Task

Force Member

Location: Department of Energy and Environment (E&E) Headquarters, Live streamed

on Arkansas PBS

Subject: Public Hearing

Task Force

Becky Keogh, E&E Kevin Pfalser, Liquefied

Secretary, Task Force Chair Petroleum Gas Board Director,

Task Force Member

Mike Preston, Secretary of

Commerce (Morning

Session)

Steve Sparks, Director, Arkansas Economic

Development Commission. Existing Business Resources, representing Mike Preston, Commerce Secretary

(Afternoon Sessions)

Other Attendees

Chad Kinsley, Vice President of Operations, Black Hills Energy Arkansas, Inc.

David Brink, Senior

Manager, Black Hills

Energy Hills Energy Arkansas, Inc.

Tom Stephens, Director,

Regulatory and Finance,

Black Hills Energy Arkansas, Inc.

Miles Kenny, Vice

President of Gas Supply, Centerpoint Energy, Inc.

Cindy Westcott, Vice

President of Regional

Operations for Arkansas

and Oklahoma, Centerpoint Energy, Inc.

Rodney Baker, Executive

Director, Arkansas Independent

Travis Matlock, Electric Utility Director for the City of Bentonville, Arkansas Municipal Power Association

Jason Carter, General Counsel, Arkansas Municipal Power Association

Aaron Doll, Senior Director of Energy Strategy for Liberty Utilities Co./Empire Municipal Electric Company Co.

Nate Morris, Director of Transmission Planning Operations, Empire Municipal Electric Company/Liberty Utilities Co.

Tim Wilson, Vice President of Electric Operations for Empire Municipal Electric Company/Liberty Utilities Co.

Donald Rowlett, Managing Director of Regulatory Affairs for OGE Energy Corp.

Bradley Hardin, Manager-Government Affairs, Southwestern Electric Power Company

Andrew Lachowsky, Vice President of Planning and Operations for Arkansas Electric Cooperative Corporation

Laura Landreaux, President and CEO of Entergy Arkansas, LLC

John Bethel, Director of Public Affairs for Entergy Arkansas, LLC Randy Eminger, Executive Network, Energy Policy Network

Michael Nasi, Jackson Walker, Attorney

John Peiserich, PPGMR, LLC, Attorney

Shane Khoury, E&E

Daniel Pilkington, E&E

Beth Thompson, E&E

Donnally Davis, E&E

Troy Deal, E&E

AGENDA ITEMS

Andrea Hopkins, E&E

Tricia Treece, E&E

1. Call to Order Secretary Keogh

Secretary Keogh, as Task Force Chair, called the meeting to order at 10:04 am. Secretary Keogh explained hearing logistics. For each organization, opening testimony was limited to five minutes with up to fifteen minutes for questions and answers from Task Force Members. Opening logistics were repeated at the start of each session.

2. Summary of Testimony from Chad Kinsley, Vice President of Operations and David Brink, Senior Manager, Gas and Supply **Black Hills Energy**

Mr. Kinsley distributed a handout to Task Force members providing an overview of Black Hills Energy. Mr. Kinsley explained that during the February 2021 extreme weather event, they exceeded their prior system peak by more than 20%. Their investments, team and messages to conserve energy allowed them to meet the extraordinary demand. Mr. Kinsley explained that they contacted large volume customers in advance to prepare for curtailment and encouraged energy conservation through direct communication, broadcast, social media, and their website. On February 16, Black Hills received Force Majeure notices from suppliers due to compressor failures and freeze offs. Service to Pea Ridge was lost.

Mr. Kinsley explained that they file an annual natural gas supply strategy. Storage in the central region is an important part of this strategy. Mr. Kinsley emphasized the importance of having a supportive regulatory environment for production, storage, and pipelines.

Mr. Kinsley encouraged close coordination between electric utilities and gas utilities in the event

electric utilities find it necessary to implement rolling blackouts. When power comes back online, it can cause surges in gas demand and strain resources. Mr. Kinsley also recommended sharing additional communication to customers to provide awareness of financial help.

The Black Hills representatives were asked how to continuously improve what we do and respond to changing conditions. They were also asked whether they had any customers caught off guard with respect to not having a special needs affidavit and if there was anything that can be done to minimize costly damage to equipment. Mr. Kinsley responded that Black Hills hadn't had to curtail for 25 years. They reached out directly to large volume customers informing them of potential curtailments. Mr. Kinsley indicated there may be opportunity for educating customers.

The Black Hills representatives were asked whether there had been any follow-up on the Pea Ridge curtailment. Mr. Kinsley explained that Black Hills had been communicating with city leaders to make them aware of the situation and also took out newspaper ads to make the community aware. They have started building a new pipeline to the community.

The Black Hills representatives were asked how they can assure new industrial companies wanting to locate into the area of the availability of gas supply. Mr. Kinsley explained that the need for additional capacity in the Pea Ridge area was a known issue. Black Hills uses modeling systems to plan for capacity to meet the growth expected in decades to come.

The Black Hills representatives were asked why there is opposition to natural gas for heating homes and electricity. Mr. Kinsley responded that natural gas is working to tell their story about how gas has offset worse greenhouse gas emitters (coal). He suggested that the industry needs to tell their story better.

The Black Hills representatives were asked about any steps the state could take if equipment in another state is frozen and can't be delivered. Mr. Kinsley suggested that we could look at developing Arkansas's energy resources. The Oil and Gas Commission or other entities could study whether facilities could be transitioned to natural gas storage. On the demand side, Mr. Kinsley suggested that the state could look into expanding energy efficiency programs to reduce or slow the demand growth for natural gas.

The Black Hills representatives asked whether large users have the ability to store fuel on site. Mr. Kinsley answered that the economics for storage on site aren't favorable due to low natural gas prices.

The Black Hills representatives were asked if incentives would help, to which they responded yes.

The Black Hills representatives were asked if gas that serves Arkansas is coming from Oklahoma/Texas, which was confirmed by Mr. Kinsley.

The Black Hills representatives were asked whether weatherization would have prevented the supply shortages. Mr. Brink responded that most of their gas is purchased from an upstream supplier. The further north you go, you will see weatherization to a certain extent. Mr. Brink indicated that addressing well head freeze offs would be between the states and producers to identify what requirements should be.

The Black Hills representatives were asked whether they were aware of any state incentives/policies around weatherization of natural gas production resources. Mr. Brink said that there were not any in existence, but that Texas is looking at a bill that would establish weatherization requirements.

The Black Hills representatives were asked whether storage facilities played a role during the February 2021 winter weather event. Mr. Kinsley responded that two storage facilities in the Ozarks played a huge role.

The Black Hills representatives were asked whether they were looking into additional storage areas. Mr. Kinsley responded that there was an opportunity to look for additional reservoirs that could be storage facilities.

The Black Hills representatives were asked whether it is feasible to notify gas users if there will be a change in price. Mr. Kinsley explained that many of their customers purchase gas from third-party suppliers. Black Hills is not part of the transaction. He suggested that they could build something into their contracts with suppliers.

The Black Hills representatives were asked whether it is feasible to use an interruptible tariff for natural gas to encourage voluntary curtailment. Mr. Kinsley explained that Black Hills does not currently have an interruptible gas tariff. They would need to look at opportunities to develop this. Most customers would want to retain some level of usage.

3. Summary of Testimony from Miles Kenny, Vice President of Gas Supply and Cindy Westcott, Vice President of Regional Operations for Arkansas and Oklahoma CenterPoint Energy, Inc.

Mr. Kenny discussed CenterPoint's focus on a diversified portfolio of supply products to ensure that they can distribute gas to its customers during all months and weather scenarios. See CenterPoint PowerPoint slides for additional information presented in opening testimony.

CenterPoint representatives were asked whether they had any recommendations on what a customer could do on the front-end to voluntarily curtail if cost exceeded a certain level or if they could set a hard line on the amount of gas they need to receive to avoid catastrophic damage to equipment. Mr. Kenny responded that the broader you cast your net for upstream suppliers, the more protective the system is from cost spikes. Mr. Kenny explained that their diverse supply portfolio provides some shielding from high day market prices. Mr. Kenny suggested that the consumer would need to work out voluntary curtailments and price signaling with their supplier, not CenterPoint. Mr. Kenny explained that when CenterPoint went through the curtailment process, it was based on upstream supply and the need to maintain broad reliability.

The CenterPoint representatives were asked about whether they were in the position to make a decision about preventing catastrophic damage to equipment in the event of a potential curtailment. Mr. Kenny explained that the customers need to work with their upstream supplier to understand demand and plan accordingly.

The CenterPoint representatives were asked whether there were plans to have more communication among suppliers, the pipeline, and customers next year. Mr. Kenny explained that it was already happening. Some customers are wanting to leave the Transport customer class and go to sales. Some customers are looking at onsite back up.

The CenterPoint representatives were asked about the suitability of liquefied natural gas as a backup asset. Mr. Kenny explained that liquefied natural gas may work best when there is a longer lateral with a supply issue at the end of the line to add reliability and balance. It has not been needed in Arkansas, but they are constantly evaluating scenarios and how they would impact customers.

The CenterPoint representatives were asked about their statement that 50% of their gas used was from the summer and if this was futures pricing issue. Mr. Kenny explained that part of the way a storage facility worked was injecting supply during summer lower demand months when gas is cheaper and then using it during higher demand winter months.

The CenterPoint representatives were asked if they know a reason why the government should be opposed to the use of natural gas. Mr. Kenny responded he didn't see a reason for that.

The CenterPoint representatives were asked about their service area. Mr. Kenny explained that they serve eight states with supplies in multiple states.

The CenterPoint representatives were asked about where gas was stored. Mr. Kenny explained that the storage was on the Enable system and that he wasn't sure where storage sites are located.

The CenterPoint representatives were asked whether CenterPoint is part of an effort to look for more storage. Mr. Kenny explained that they recently made a reduction in storage to bring in more baseload market area supply. He emphasized getting to an overall diversity of supplies. Mr. Kenny explained that active supply is flowing every day, not sitting underground in storage. He explained that he wouldn't say one way is more reliable than another. In some cases well head supply failed and storage failed in others. Mr. Kenny explained that they want to have as many supply options as possible.

The CenterPoint representatives were asked whether there was something that CenterPoint and other companies could do to better notify customers of curtailment. Ms. Westcott responded that the events of February 2021 leading to curtailment happened quickly. She explained their use of media notices and press releases to notify customers of potential curtailment. She also explained that CenterPoint has over 600 transportation customers that contract directly with suppliers. Maintaining up-to-date contact information with these customers and having more staff to make calls would be an opportunity to provide better notification if something like the February 2021 weather event were to happen again. Ms. Westcott explained that, at the time, they had employees responding to emergencies and at times having to drive in hazardous conditions to go shut a customer off. Ms. Westcott indicated that there are opportunities for more robust education about transportation contracts and managing energy.

4. Summary of Testimony from Rodney Baker, Executive Director

Arkansas Independent Producers & Royalty Owners, AIPRO

Mr. Baker explained that the association didn't respond to the written testimony questions but could provide general information from producers. Mr. Baker explained that the February 2021 winter event caused hardship for producers. Mr. Baker described the imbalance between heating equipment and wells. Mr. Baker explained that top producing wells were prioritized and that staff worked around the clock, including spending the night at well sites.

Mr. Baker was asked whether he knew if all of Arkansas's wells were able to produce during the event. Mr. Baker explained that in some cases producers were totally shut out. They prioritized more productive wells. Mr. Baker explained that even though Arkansas production areas are fairly dry, there is still some separation of liquids and that separators can freeze up shutting out the well. If wells get froze in, the producers convey that information so the transporters can adjust pressures. Mr. Baker explained that keeping the roads open was important for their access to the wells. He suggested that other resources, such as the national guard, could have been used to keep the assets open.

Mr. Baker was asked whether he had any thoughts or recommendations for the Task Force to consider. Mr. Baker suggested that compressors should not be included in electricity curtailments. He also suggested providing more consumer education and suggested that having recreational housing temperatures turned down when they are unoccupied could help. Mr. Baker also emphasized keeping electricity at facilities that are moving gas and keeping roads open is important.

Mr. Baker was asked about weatherization efforts in the northern part of the state. Mr. Baker

responded that many companies tried to borrow heater facilities to keep wells thawed out. They had approximately 60 units that they could access, but thousands of wells. He said he couldn't speak to the producers' thoughts, but the cost of being prepared for a fifty year event may not be feasible.

Mr. Baker was asked what percentage of Arkansas gas production remains in Arkansas. Mr. Baker did not know. The gas is sold through a third party and much of the shale gas goes out of state. In a simplistic sense, Arkansas had natural gas for use in the state before increased production of Fayetteville shale supply. Because the infrastructure was in place, shale gas was piped out of the state.

Mr. Baker was asked about whether the three operators in the Fayetteville shale region were looking at weatherization issues. Mr. Baker said that he assumes they are, but that they haven't met in a format where it could be discussed.

Recess 11:18 – 1:06

5. Summary of Testimony from Travis Matlock, Electric Utility Director for the City of Bentonville and Jason Carter, General Counsel for Arkansas Municipal Power Association

Arkansas Municipal Power Association (AMPA)

Mr. Matlock explained that association members are diverse in size and ways of providing power. Options are based of diversified risk, assets, contracts, and ownership. For example, Jonesboro has a fixed price and own their own assets. Their prices were not impacted by the February 2021 winter event. For some, a third party manages aggregated risks under a full requirements contract. For example, Bentonville has a long term contract with SWEPCO. During the storm, they didn't experience curtailment or outages, but there was a significant increase in the fuel bill. Their typical fuel bill is \$4 million for the month of February. This February, their bill was \$20 million, almost half their annual budget. Bentonville is working with SWEPCO on an audit of bills.

The AMPA representatives were asked about what the state can do to make sure there is diversity and to make better use of baseload power during excess demand events. Mr. Matlock explained that members with long-term contracts with an outside provider are wholly reliant on that provider. Mr. Carter explained that this is true in any city with full requirement contracts. Mr. Carter said that access to natural gas is important for efficient behind the meter gas generation.

The AMPA representatives were asked what could be done to improve access to natural gas for cities with generation assets. Mr. Carter explained that, during an emergency event, there is a need to understand how to best direct gas when resources are constrained. Gas is needed to heat homes but it is also needed to generate electricity to operate fans to drive the warm air into the homes. This means that some industries may not get gas if we are prioritizing the needs of society.

The AMPA representatives were asked how many of their members have generating capability and whether those generating assets were fossil fuel powered. Mr. Carter said that about half of the members have generating assets. Most of the recent additions have been renewable. North Little Rock owns a hydro facility. Most other developments have been solar. Mr. Carter explained that some members do have some older natural gas or diesel driven facilities for generation.

The AMPA representatives were asked whether renewables could be used for baseload. Mr. Carter responded no.

The AMPA representatives were asked whether the planned obsolescence of fossil fuel generators could be a problem down the road. Mr. Carter explained that there are a lot of environmental concerns related to the consumption of fossil fuels for electricity. He emphasized that the most important thing is to provide reliability. When reliability fails, people lose their lives. Mr. Carter explained that natural gas is a critical fuel and that there is debate about its long-term use or use as a transition fuel.

The AMPA representatives asked whether the freezing problems with natural gas might have been avoided if there had been weatherization in place and whether they have any recommendations. Mr. Carter indicated that thinking about how much is enough is relevant for weatherization. Do you plan for the 100 year event? Mr. Carter stated that AMPA members worked to protect control panels, valves, and switches and still had challenges with the temperatures we had.

The AMPA representatives were asked whether the increase in cost was due to electric or gas, to which Mr. Carter responded that it was the gas prices.

6. Summary of Testimony
From Aaron Doll, Senior
Director of Energy
Strategy, Nate Morris,
Director of Transmission
Planning and Operations,
Tim Wilson, Vice
President of Electric
Operations

Empire Municipal Electric Company/Liberty Utilities Co.

The representatives from Empire explained that the primary causes of the curtailment event were 1) the extreme weather conditions (both cold and snowfall), 2) simultaneous record-breaking demand peaks with fuel supply disruptions, and 3) transmission issues. The Empire representatives explained that they issued alerts to customers asking folks to conserve energy, curtailed some large commercial and industrial customers, and employed controlled interruptions in one hour blocks.

The Empire representatives were asked whether they had any recommendations to encourage customers to volunteer for curtailment to prevent cost increases or mitigate damage. They were also asked if there were any lessons learned on notifications to customers. The Empire representatives explained that they have an interruptible tariff to incentivize voluntary curtailment. Empire reached out to customers with curtailable contracts and others. The Empire representatives emphasized the need to prepare and have contacts and relationships established. Empire representatives described the cooperation between the utility and industrial customers, including some industrial customers, who curtailed for a sustained period without even being asked.

The Empire representatives were asked if there was anything that they could have looked at in hindsight that they weren't aware of at the time. The Empire representatives explained that they felt prepared from an emergency operations procedures standpoint. These were implemented without issue. The Empire representatives emphasized the importance of a diverse fuel supply and talked about new weatherization technology that is now being included in new wind farms. The Empire representatives also discussed the reliability that dual fuel units (natural gas/fuel oil) provide. The Empire representatives suggested looking at investments in generation resources, looking for multiple ways to deliver fuel, and looking at market products to encourage investment in reliability. The Empire representatives explained that having conversations and collaboration with neighbors was a huge benefit to the system. The Empire representatives explained that there was opportunity to look at scaled up communication platforms to serve their majority rural footprint.

The Empire representatives were asked whether wind generation is typically weatherized. The Empire representatives explained that newer wind farms tend to have a cold weather package

available and that utilities have been taking advantage of them. The representatives weren't sure about the ability to retrofit older facilities with cold weather packages. The wind delivered to the Empire system met their forecast.

The Empire representatives were asked what they meant about investment signal language. The Empire representatives explained that historically the marginal price to bid into the market is extremely low. When you need additional resources, the right kind of investment signals are needed. High prices send the message that additional generation is needed. The Empire representatives suggested that the RTOs could create market products that incentivize reliability on the system.

The Empire representatives were asked whether the MISO and SPP would be the entities to direct the market products or if that would be under someone else's purview. The Empire representatives indicated that it would be most effective if the RTOs create the market products to send the right investment signals to the utilities.

The Empire representatives were asked what kind of fuels need to be looked at for baseload. The Empire representatives responded that a diverse fuel supply is needed. They explained that there has been a transition to natural gas, but that you have to manage the reliability of not having an onsite fuel supply. They suggested storage, liquefied natural gas, winterization, and dual fuel systems could help. The Empire representatives explained that they had coal plants that tripped offline, low gas pressure issues, and wind farms with frozen turbines. They recommended having a diverse fuel supply to be able to navigate reliability.

The Empire representatives were asked if they were referring to a dual fuel unit as powered by natural gas and fuel oil. The Empire representatives responded that it doesn't exclusively have to be that configuration. They explained that there is a benefit to being able to use multiple fuels, especially fuels that can be kept on site.

The Empire representatives were asked about other examples of onsite dual fuel. The Empire representatives explained that they were looking at a variety of resources, including over-firing with hydrogen, battery storage, and propane.

The Empire representatives were asked how to define reliability-based products. The Empire representatives explained that SPP manages what they need on the system to create market products. SPP has locational marketing prices and ramping prices to compensate for system needs. Market products incentivize what kind of generation is built.

The Empire representatives were asked if creating market products was the role of the RTO, which they confirmed.

7. Summary of Testimony from Donald Rowlett, Managing Director of Regulatory Affairs

Oklahoma Gas and Electric (OG&E) and OGE Energy Corp.

Mr. Rowlett explained that the challenge of the February 2021 winter event was two fold: 1) maintaining generation to prevent uncontrolled outages and 2) protecting the ability to procure fuel in light of a high cost-constrained natural gas supply.

Mr. Rowlett explained that Oklahoma Gas and Electric focused on keeping generation online and when curtailment was needed they performed controlled outages that were limited in scope and duration. He emphasized that they served 99% of hours overall. Mr. Rowlett explained that the OG&E's goal was to minimize service disruptions and give advanced notice when possible.

Mr. Rowlett discussed the use of Emergency Alert levels during the event. Mr. Rowlett explained

that OG&E passes fuel costs directly to customers with no markup. He expressed gratitude to the Arkansas legislature for the securitization bill they passed that allowed them to spread the cost to customers out over 10 years.

Mr. Rowlett was asked to describe the diversity of their fuel supply. Mr. Rowlett explained that OG&E has 7200 MW of generation capability, 1800 MW of which is coal. Mr. Rowlett explained that they had recently converted 1000 MW of coal-fired generation to natural gas and installed scrubbers on the remaining coal units. This strategy allowed them to comply with Regional Haze Rule requirements while maintaining fuel diversity. Mr. Rowlett also mentioned that OG&E had purchased two combined cycle plants that were originally built as merchant plants in the early 2000s. Mr. Rowlett explained that lessons learned during a weather event in 2011 helped them because after that event, they started putting protective measures in place to weatherize units. Mr. Rowlett mentioned that OG&E also has a small amount of solar, but the biggest resources in their mix are wind, natural gas, and coal.

Mr. Rowlett was asked whether combined cycle units were dual fuel. Mr. Rowlett responded that the combined cycle units they operate are not. Mr. Rowlett explained that combined cycle uses two methods to get energy out of natural gas: combustion turbine and a steam boiler heated with exhaust gas.

Mr. Rowlett was asked whether OG&E sells on the grid. Mr. Rowlett explained that OG&E sells all of its generation into the integrated market and all customers' needs are purchased out of the market.

Mr. Rowlett was asked what he sees as the best fuel for baseload generation. Mr. Rowlett explained that he still thinks that natural gas is the best fuel given the environmental concerns with coal. Mr. Rowlett suggested considering dual fuel capability.

Mr. Rowlett was asked about the scrubbers put on 2 of their coal units. Mr. Rowlett explained that they put scrubbers on both units for about \$490 million.

Mr. Rowlett was asked what part of their generation is satisfied with baseload. Mr. Rowlett explained that 60% of their units were designed for baseload, but on any given day they may see 70% provided by wind. Their baseload units aren't operating like a baseload unit based on the way units are dispatched.

Mr. Rowlett was asked what percentage of electricity needs should come from a reliable baseload type fuel. Mr. Rowlett explained that intermittent resources are credited for less than their actual capacity. You need total credited capacity to meet peak. Mr. Rowlett explained that dispatching resources are typically fossil fuels. He also stated that solar, with its higher capacity factor than wind, is also a good resource. Mr. Rowlett also mentioned that solar wasn't very helpful during the February 2021 event due to the cloud cover.

Mr. Rowlett was asked whether he had any recommendations or best practices around notifications. Mr. Rowlett suggested that communication in as many ways as possible: traditional press, social media, text messages, etc. was beneficial. He also suggested that some people may need additional help understanding what is being asked.

8. Summary of Testimony from Bradley Hardin, Manager-Government Affairs

Southwestern Electric Power Company

Mr. Hardin provided an overview of the area the utility serves and their generating assets in Arkansas. Mr. Hardin explained that SWEPCO has diversity in fuel sources and location of generation assets to address local and system-wide needs. All of SWEPCO's generation assets are

within the SPP RTO. Mr. Hardin described the appeal for conservation and described their outreach via news releases, social media, text messaging, and communicating with local government about controlled interruptions. SWEPCO had two limited controlled interruptions during the event.

Mr. Hardin was asked whether most customers that experienced a brief outage had notice. He was also asked if he heard any concerns from customers who were not aware. Mr. Hardin mentioned that he knew of one commercial customer he interacted with who felt that he didn't have adequate notice.

Mr. Hardin was asked what adequate notification looks like. Mr. Hardin explained that SWEPCO and others need to add to a proactive communication list. He explained that, at the same time, they did issue a press release to the news media, made extensive use of social media, and used all of the available tools to make sure the word was spread.

Mr. Hardin was asked about the coal plant in southern Arkansas. Mr. Hardin explained that the Turk facility operated by SWEPCO came online in 2012 and is one of the most efficient, cleanest coal units in the United States.

Mr. Hardin was asked about coal freezing. Mr. Hardin explained that typically coal plants keep a 30-day supply at full load volume on the ground at the plant. The coal is moved with large tractor equipment. The coal has moisture content, which is even higher than lignite. It can freeze.

Mr. Hardin was asked about what he sees as the best fuel for baseload generation. Mr. Hardin responded that natural gas is the best fuel for baseload generation for cost and environmental reasons.

Mr. Hardin was asked how Arkansas plays a part when well freezes prevented natural gas from coming into the state. Mr. Hardin suggested that additional weatherization is warranted to ensure there is no freezing or locking up.

Mr. Hardin was asked who was responsible for weatherization of the natural gas system. Mr. Hardin explained that it was the producers.

Mr. Hardin was asked if it was his understanding that RTOs were responsible for directing efforts towards the mix, which Mr. Hardin confirmed.

Mr. Hardin was asked about whether the City of Bentonville was notified of pending fuel surcharge increases before they happened. Mr. Hardin responded that they were advised ahead of time that increased costs were possible; but, SWEPCO couldn't quantify the increases at the time.

9. Summary of Testimony from Andrew Lachowsky, Vice President of Planning and Operations

Arkansas Electric Cooperative Corporation

Mr. Lachowsky explained that electric generation planners use a "no more than one day of outage in ten years" as a reliability goal. Mr. Lachowsky pointed out that the zero degree weather affected coal, gas, and wind resources and that natural gas was not available. He noted that during the event, AECC became a winter-peaking utility with 51 hours during the event exceeding their all-time summer peak.

Mr. Lachowsky explained that there are no easy solutions and that a single utility cannot act unilaterally to ensure reliability. Mr. Lachowsky explained that actions needed to ensure reliability must be region-wide and that SPP and MISO are working with stakeholders on this. Mr. Lachowsky stated that wind and solar are valuable energy resources, but there are times when they don't produce

well. Mr. Lachowsky also provided that four-hour energy storage using current battery technology is also not the answer. Mr. Lachowsky talked about the increased cost and permitting associated with burning fuel oil. Mr. Lachowsky expressed the hope that any new natural gas facility replacing White Bluff and Independence will include the ability to burn fuel oil.

Mr. Lachowsky was asked whether RTOs or the Task Force should include storage as part of an overall investment should we encounter another weather event. Mr. Lachowsky explained that Enable is evaluating additional ties into another natural gas pipeline. Mr. Lachowsky stated that tieins to significant natural gas storage don't exist in the Oklahoma area. Mr. Lachowsky suggested that having a robust system for both natural gas and electricity transmission would be valuable.

Mr. Lachowsky was asked what strategies are being looked at. Mr. Lachowski talked about the value of a diverse mix. For example, droughts can impact hydropower and steam plants. Solar is helpful in the summer.

Mr. Lachowsky was asked what the best fuel for baseload generation is. Mr. Lachowsky stated that natural gas is the best fuel for baseload generation based on economics and availability.

Mr. Lachowsky was asked what the second fuel in a dual fuel system was. Mr. Lachowsky stated it could be diesel or fuel oil.

Mr. Lachowsky was asked if he was aware if anyone had used propane for replacement generation. Mr. Lachowsky stated he was not aware if it was being used for that.

Mr. Lachowsky was asked what the RTO's motivation was: to make decisions based on reliability of fuel versus economics versus political decisions. Mr. Lachowsky explained that AECC participates in both SPP and MISO. The two RTOs act differently. On the MISO-side, they have a capacity market that has been clearing at zero and signaling that capacity is free. They are looking into making changes so that no entity can lean exclusively on the capacity auction. SPP does what the members want them to do. SPP doesn't tell you what you have to bring to the mix, just that you have to bring a certain amount of generation resources to meet needs.

Mr. Lachowsky was asked why most of the generating units being built are alternatives, but when asked, the utilities say the best baseload generation is natural gas. Mr. Lachowsky described changes SPP and MISO are making to examine how solar and wind perform each season instead of just summer peak.

Mr. Lachowsky was asked who AECC would be looking to on permits for additional fuels. Mr. Lachowsky indicated that they would be looking to DEQ.

Mr. Lachowsky was asked whether he had any comments on notification best practices and challenges. Mr. Lachowsky explained that each of the 17 co-ops made appeals to conserve and that each does it differently. Mr. Lachowsky stated that they alerted their 8 large interruptible customers about pricing and that they may be curtailed.

Recess Resumed at 3:04 PM

10. Summary of Testimony from Laura Landreaux, President and Chief Executive Officer and John Bethel, Director of

Entergy Arkansas, LLC

Public Affairs

Ms. Landreaux explained that the extreme weather event presented challenges for Entergy at many levels and that the system performed well with outages that were limited in both amount and duration. Ms. Landreaux explained that a variety of notifications were used to request customer conservation to address the supply/demand imbalance including calls, text messages, broadcast, and social media.

Ms. Landreaux emphasized use of a diverse set of generation resources to provide safe and reliable electricity at a reasonable rate. Ms. Landreaux explained that Entergy is the largest transmission owner in Arkansas and that transmission investments have strengthened the system. Ms. Landreaux stated that Entergy continues to invest in modernizing the system, including investments in advanced meters.

Ms. Landreaux described the historically high demand during the February 2021 weather event and that having high usage and demand during the winter creates additional challenges because there is competition for natural gas for both heating and other direct uses. At the direction of MISO, Entergy conducted rolling intermittent outages of short duration. Ms. Landreaux explained that Entergy continues to evaluate experiences and explore opportunities to improve preparedness, operations, and communication.

The Entergy representatives were asked how having nuclear baseload benefited them and how winter events might affect investment strategies going forward. Ms. Landreaux talked about Entergy's emphasis on diversification. The investment in Nuclear One has served them very well. They received a license extension to operate between 2034 and 2038. Ms. Landreaux explained that they will continue to evaluate and do maintenance to keep Nuclear One in good shape so they can seek another license extension when the time comes. Ms. Landreaux noted that the units performed exceptionally well with one unit having a concern caused by transmission issues. She noted that in 2020, 70% of Arkansas customers were served with nuclear energy.

The Entergy representatives were asked what they see as the future to maintain and continue the workforce to maintain reliability. Ms. Landreaux stated that Entergy recognizes that the workforce training/development issue is real. She described investments that Entergy has made in partnering with technical colleges and the Department of Education.

The Entergy representatives were asked if there was currently any appetite to explore more nuclear energy. Ms. Landreaux stated that the Nuclear One has served Arkansas very well and that nuclear is a great resource. They continue to look at whether new nuclear can be cost-effective going forward.

The Entergy representatives were asked what part regulation may play in making new nuclear cost prohibitive. Ms. Landreaux explained that there are a lot of significant costs for equipment, startup and infrastructure. She doesn't believe the regulatory side costs are comparable to those upfront investments.

The Entergy representatives were asked about the planned obsolescence of Independence and White Bluff. They were asked if they would maintain them for standby or backup. Ms. Landreaux explained that maintaining them would require investment in controls. She stated that these units are at the end of their life and dollars would be better spent in investing in new technologies that would provide a better benefit to customers.

The Entergy representatives were asked about what type of replacement capacity they were looking at. Mr. Bethel responded that diversity is critical and that there will continue to be a mix of resources, including nuclear and gas. They are also looking at natural gas co-fired with hydrogen and

are investing in solar. Mr. Bethel said Entergy will continue to have a mix of generating resources, both baseload and renewables.

The Entergy representatives were asked about what percentage of generating capacity can be from renewable sources of energy with current transmission capacity from a reliability standpoint. At what point would we need to invest a good deal more in transmission? Mr. Bethel responded that Entergy plans to become net zero carbon by 2050, but that this goal is not the same as having 100% of capacity as renewable energy. Mr. Bethel said that energy resource planners would be more capable of answering questions about the capability of the transmission grid.

The Entergy representatives were asked how much load in 10 years will be served by wind. The Entergy representatives responded that they have issued a request for renewable resources, including wind. They indicated that wind resources in Arkansas are limited, so there is additional cost to bring wind into the system here. They will continue to evaluate whether diversification outweighs cost. Entergy doesn't currently have wind in its mix.

The Entergy representatives were asked whether extreme weather affects transmission lines. The Entergy representatives indicated that it could, but that neither of the Entergy representatives present could elaborate on how.

The Entergy representatives were asked whether there is something Entergy is looking into to improve notice to customers about the nature of outages. For example, some customers got notice 45 minutes into one of the rolling outages and weren't sure whether this was curtailment or if there was damage knocking out power to their homes. The Entergy representatives explained that the timeframe that they learned that MISO was calling for curtailment and when the first curtailment took place was very short. They had a list of circuits to turn off and then back on. They indicated that there is room to be able to identify the customers served on each of the circuits and better direct communication about who is next to experience outages.

The Entergy representatives were asked whether they had any recommendations on how the state could assist companies with notifications. The Entergy representatives stated that using social media messaging would be helpful because they may have a different audience than the state has. They also indicated that sharing on different outlets is a helpful, useful tool. They stated that communication to customers is top of mind to Entergy.

11. Summary of Testimony from Randy Eminger, Executive Network, and Michael Nasi, Attorney Energy Policy Network (EPN) and Jackson Walker Law Firm

Mr. Eminger stated that a lot of attention has been put around the weather, but that what started five years ago is being left out. Mr. Eminger pointed out that in MISO, 45 baseload power plants (coal, nuclear, and gas) have been closed. In MISO, 15 baseload power plants have closed. Mr. Eminger stated that the RTOs closed these and that he believes that, if these power plants had been online during the February 2021 winter event, MISO and SPP wouldn't have experienced power shortages like what were experienced during the event. Mr. Eminger indicated that these closures are driven in part by price, but also through policies of certain states. Mr. Eminger stated that Arkansas should be concerned when policies in other states are affecting Arkansas.

Mr. Nasi explained that the power shortages in Arkansas are minor by comparison to what happened in Texas. Mr. Nasi discussed the changes in Texas' fleet and what has happened in ERCOT. Mr. Nasi stated that there were great similarities in terms of what has happened in Texas and where things might be going in SPP and MISO.

Mr. Nasi warned that we were four minutes from the most epic energy disaster in the country. He

stated that he has been involved in advocacy efforts to wake Texas up to the shortcomings of their energy market design. Mr. Nasi stated that to understand what happened in Texas you have to look at their installed capacity with one third of capacity being intermittent and baseload shutdowns over the past five years. He stated that the big story of the February 2021 event was natural gas supply with finger pointing about electricity lost at the wellhead and gas not being ready for winter.

Mr. Nasi said that he advocates on behalf of every fuel source and that they all have great attributes and downsides. Mr. Nasi stated that a just-in-time dependent fleet is a risky fleet and that having gas as the sole dispatching resource is risky. He said that no one wants to talk about the fuel security that coal and nuclear provide. He indicated that coal freezing in a train was the problem, not frozen coal piles at plants. He stated that the February 2021 winter event is a story about how great coal and nuclear are. Mr. Nasi spoke of the need for comprehensive market reforms in Texas, such as creating a seasonal operating reserve as a new product on the ERCOT market and fuel storage requirements.

Mr. Nasi recommended prevention of decisions being driven by perceived obsolescence. He stated that units can be retrofitted with environmental controls, which is a big investment. He said that coal plants that have made those investments have been happy with it. He suggested that if the coal plants that retired recently were available, the shortages in Texas would have been limited to about three hours. Mr. Nasi said that this doesn't make gas a bad fuel. However, he stated that having gas as the sole dispatching component of a system is dangerous. He is concerned that Arkansas, MISO, and SPP are moving in that direction.

Mr. Nasi highlighted a finding in a MISO report that significant disruption is expected once you get past 30% intermittent resources based on the current transmission grid. He stated that Texas' experience during the February 2021 event is not an accident given that they have 33% intermittent energy capacity.

Mr. Nasi recommended that the state stand up within its role in SPP and MISO. He stated that state policies must be absorbed into RTO market rules. He suggested passing reliability standards and being weary of retirements. He stated that coal plants can comply with environmental law if you invest in them. He recommended that Arkansas take a very jaundiced view of any retirements in the wake of the February 2021 winter event.

The representatives of EPN and Jackson Walker were asked if they see storage for natural gas as a key part of pricing for RTOs. Mr. Nasi answered affirmatively and talked about the large portion of the fleet that is served by natural gas and that it is the best technology we have for a quick start. He said that gas storage is all about siting and economics. He suggested that siting criteria should factor in gas storage capabilities. Mr. Nasi stated that super low gas prices have a lot to do with the lack of investment in gas storage capabilities. He emphasized the need for better price signals for thermal generation to bring about more favorable economics. He stated that he is bullish on storage, but skeptical about it being a meaningful part of the bulk electric system.

The representatives of EPN and Jackson Walker were asked if there was a sweet spot for intermittent resources. Mr. Nasi stated that battery storage would allow intermittent energy to be more functional. He mentioned price spikes happening in colder months when solar and wind did not generate as much as forecast.

The representatives of EPN and Jackson Walker were asked about where incentives to keep existing baseload remaining in operational reserve would come from. Mr. Nasi responded that it would be highly dependent on state policy and market rule of the grid. Markets could better value market reserves and states could create incentives for reliability, carbon capture, etc. Mr. Nasi said the state of Arkansas can advocate in its role within MISO and SPP for better valuation of winter fuel secure resources. Mr. Nasi also described the concept of firming where new intermittent resources must have thermal backup. Mr. Nasi also discussed his efforts to keep coal plants open. He stated that

once the capacity is gone, it is gone forever. Mr. Nasi stated that he was a firm believer that environmental controls are a good investment.

The representatives of EPN and Jackson Walker were asked who would contract for intermittent capacity tied to baseload capacity. Mr. Nasi stated that there is already an ancillary services product in the market. He described the different ways that renewables and thermal generation participate in the market. He suggested that there could be a balancing that requires the intermittent resource generator to have dispatching back up through battery, contract, or with the RTO.

The representatives of EPN and Jackson Walker were asked if they would define baseload as on call fuels. Mr. Nasi stated that we are in good shape in Arkansas right now, but that MISO and SPP are heading in a direction that will look like ERCOT driven by tax policy for wind and solar and state policies. Mr. Nasi suggested that states pass policies that prioritize dispatching and ensure reliability. Mr. Nasi stated that future building plans in MISO and SPP look scary.

The representatives of EPN and Jackson Walker were asked how to bring about Mr. Nasi's recommendations when different states have different processes. Mr. Nasi stated this is a difficult nut to crack because each state sets policies based on their values.

12. Summary of Testimony from John Peiserich, Attorney

PPGMR, LLC

Mr. Peiserich explained that his comments are his own and do not reflect his clients. Mr. Peiserich suggested that Arkansas adopt a similar statute to the Texas Disaster Act of 1975 to relieve electric generation facilities and other industrials of certain obligations under environmental rules if the Governor issues an executive order that a disaster has occurred or is imminent. The period of regulatory relief would only continue as long as the disaster is ongoing, but no longer than thirty days. Mr. Peiserich indicated that the relief could come in the form of time extensions on compliance or waiver of emissions control requirements or continuous emissions monitoring requirements until the emergency passes before making a repair instead of shutting down the unit immediately. Mr. Peiserich explained that Texas invoked this act during the February 2021 winter weather event and that it allowed suspension of 15 chapters of TCEQ rules to provide flexibility needed to respond to the event.

Mr. Peiserich was asked about his opinion regarding how baseload generation should be looked at. Mr. Peiserich responded that we have to have a fuel mix. In his position, he doesn't have to worry about economics. He stated that natural gas is clearly best from an economics perspective. He indicated that the bigger issue is that we have other types of generation (hydro and nuclear) that would provide tremendous benefits across the board, but they are almost impossible to permit. He explained that it may take 10 - 15 years to permit a nuclear facility.

13. Closing Remarks

Secretary Keogh

Secretary Keogh concluded the hearing at 4:14 pm.