

Federal Energy Regulatory Commission

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Case: Impacts of COVID-19 on the Energy Industry



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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION
Technical Conference:
Impacts of COVID-19 on
the Energy Industry Docket No: AD20-17-000

TECHNICAL VIDEO CONFERENCE
Federal Energy Regulatory Commission
888 1st Street NE
Washington, DC 20426
Wednesday, July 8, 2020
9:00 a.m.

1 Panel 1: System Operations and Planning Challenges

2 Panelists:

3 Michael E. Bryson, Senior Vice President, Operations, PJM
4 Interconnection

5 Timothy P. Cawley, President, Consolidated Edison Company of
6 New York

7 Stanley Graham Chapman, III, Chief Executive Officer, TC
8 Energy

9 Stanley W. Connally, Jr., Executive Vice President -
10 Operations, Southern Company Services, Inc.

11 Eric DeBonis, Senior Vice President

12 Mike Haynes, Chief Operating Officer, Seattle City Light

13 Shawn M. Lyon, President of Marathon Pipe Line, and Vice
14 President of Operations, MPLX GP LLOC

15 James B. Robb, President and Chief Executive Officer, North
16 American Electric Reliability Corporation

17 Panel 2: Electricity Demand and Transmission Planning

18 Stefan Bird, President and Chief Executive Officer, Pacific
19 Power, on behalf of PacifiCorp

20 Travis Fisher, President and Chief Executive Officer, ELCON

21 Robert "Mac" McLennan, President and Chief Operating
22 Officer, Minnkota Power Cooperative

23 Clair Moeller, President and Chief Operating Officer,

24 Midcontinent Independent System Operator, Inc. on behalf of
25 the ISO/RTO Council.

1 Panel 2 (Continued)

2 Curtis A. "Curt" Morgan, President and Chief Executive
3 Officer, New York Power Authority

4 Gil C. Quiniones, President and Chief Executive Officer, New
5 York Power Authority

6 Sam Randazzo, Chairman, Ohio Public Utilities Commission

7 Paul Segal, President and Chief Executive Officer, LS Power
8 Associates, LP

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1 P R O C E E D I N G S

2 (9:00 a.m.)

3 Panel 1: System Operations and Planning Challenges

4 MS. RODER: All right. Well thank you so much
5 for everybody who is here today. My name is Aileen Roder.
6 I'm with the Commission's Office of Energy Policy and
7 Innovation. We're extremely happy to welcome you to this
8 two-day Technical Conference to consider the impacts of
9 COVID-19 on the energy industry.

10 Before we begin with opening statements, I wanted
11 to outline a few logistics of the Technical Conference. As
12 you probably know from the Notice, we will have a two-day
13 Technical Conference with two panels on each day. Only the
14 Commissioners, the panelists, and a small group of
15 Commission staff will have speaking and video roles today.

16 The Conference is being live streamed and
17 transcribed. However, we will not be archiving it for
18 future viewing. And with those initial matters out of the
19 way, I'll now turn it over to Chairman Chatterjee to begin
20 his opening statement. Thank you.

21 CHAIRMAN CATTERJEE: Thank you Aileen and welcome
22 and good morning everyone. Thank you for joining us, albeit
23 virtually, to examine the long-term implications of the
24 COVID-19 Pandemic on the U.S. energy industry.

25 The Commission has been thinking a lot about how

1 this pandemic may affect the energy industry going forward
2 as we recover from this economic upheaval it unleashed. And
3 I'm pleased we've all convened for this discussion. It's
4 going to be extremely important today.

5 I'd like to kick things off this morning by
6 recognizing the huge amount of work and preparation it took
7 to bring us all together today. We have an incredibly
8 talented and diligent staff team that worked tirelessly to
9 develop our agenda for the Conference, and to coordinate
10 many moving parts and I am so grateful for their efforts.

11 I'd also like to thank in advance our panelists
12 for their preparation and participation. The value of these
13 two days will be the ideas that you bring to the table and
14 the ideas we further develop together, so thank you. And
15 I'd like to thank everyone who's attending today who no
16 doubt will contribute to the continuing conversations we
17 need to be having in the weeks and months to come.

18 The mantra we've all seen popping up on signs and
19 windows and on street corners that we are all in this
20 together, and that's how I'm thinking about these next two
21 days. We're here to exchange ideas and learn from each
22 other. So the Commission and its staff have already taken
23 multiple steps to provide the public and regulated entities
24 regulatory relief in the short-term.

25 We hope the discussion over the course of today

1 and tomorrow will explore the potential longer term impacts
2 of the pandemic. We're focused on helping to ensure the
3 continued auspicious functioning of energy markets, the
4 seamless transmission of electricity and transportation of
5 natural gas and oil and the reliable operations of energy
6 infrastructure today and into the future, while also
7 protecting consumers.

8 Since March, we've been seeing decreased demand
9 for electricity, gas and oil. We expect to see demand
10 rebound as we enter summer peak season, but ultimately we
11 don't know yet where these trends are heading and we all
12 face uncertainty, especially as we see a resurgence of cases
13 in various regions of the country.

14 That's why I want the Commission to get in front
15 of these issues as much as we can and to think proactively
16 about how we can respond over the coming months and even
17 years. The next two days will address a wide range of
18 topics that we must face head-on together. This includes a
19 new set of challenges the COVID-19 Pandemic has presented
20 related to supply chain, deferred maintenance, reliability
21 and cybersecurity issues, changes in demand for electricity,
22 oil and natural gas and infrastructure development.

23 We'll also have important discussions about the
24 financial impact of the pandemic. Here I'm talking about
25 the interrelated issues which is credit, liquidity, access

1 to capital and return on equity or ROE. We'll be talking to
2 the most acute types of financial risk factors, particularly
3 with respect to credit rating downgrades, as well as how the
4 emergency has affected counterparty risks.

5 These are the types of pressing, challenging
6 topics we're going to be working through together during
7 this Tech Conference. I'm really looking forward to it, and
8 I'm grateful for the level of engagement we've already seen.
9 With that I won't delay us any further and we'll turn it
10 over to my colleagues for any opening remarks they may have
11 beginning with Commissioner Glick.

12 COMMISSIONER GLICK: Thank you Mr. Chairman can
13 you hear me?

14 MS. RODER: Yes.

15 COMMISSIONER GLICK: Okay great,
16 well thank you very much. The COVID-19 Pandemic has changed
17 so many things in this country. It's altered the ways we
18 live, the ways we work, the ways we do business with one
19 another and these changes have dramatically impacted how
20 this country produces and consumes energy.

21 The good news is that the energy industry has
22 lived up to the challenge -- keeping the air conditioning
23 running, keeping the heat on, keeping the lights on. The
24 significant reason for that -- and we're going to hear I
25 think a little bit more about that today is the emergency

1 planning and the drills that the industry regularly performs
2 and conducts.

3 I want to take a second though to highlight the
4 real heroes -- the unsung heroes in the story. These are
5 the men and women who are out there on a daily basis to the
6 utility control centers or go to fix downed power lines when
7 there's damage to pipes, whether it be oil or natural gas
8 pipes.

9 Think about every day in the field, there's some
10 risk. When we get up in the morning and go downstairs and
11 turn on our computers in the safety of our homes. And
12 fortunately, it appears that this is something we're going
13 to have to live with, we're going to keep on doing for a
14 while as we see certainly test rates going way up,
15 hospitalizations going way up in certain parts of the
16 country and it's really growing at an alarming rate.

17 I think we're going to be with this situation for
18 a while and I want to say again how much I appreciate those
19 in the energy industry that are doing what they can to keep
20 things running.

21 I look forward to hearing from the panelists
22 today and tomorrow about the lessons learned as it relates
23 to the U.S. energy industry -- what's gone right, what areas
24 need improvement, and what are the implications for
25 consumers, utilities and other stakeholders on a going

1 forward basis.

2 Finally, I'm hoping to see whether Commission
3 action is necessary to address some of the issues during
4 this pandemic. But at the same time, I'm concerned that
5 some may try to take advantage of the situation and seek
6 policy changes which aren't directly connected to the crisis
7 before us.

8 We should not be abandoning and the transition of
9 the policies, the bulk of the profits and specific resources
10 that have had a difficult time competing before COVID-19.
11 Markets come with risk and although the pandemic is
12 certainly unprecedented, like during any challenge, markets
13 should drive innovation and the Commission should not look
14 to disrupt it to insulate some parties from this particular
15 risk.

16 We I look forward to hearing from everybody today
17 and thank you very much for holding this Technical
18 Conference Mr. Chairman.

19 MR. CHATTERJEE: Thank you. Commissioner
20 McNamee?

21 COMMISSIONER MCNAMEE: Thank you Mr. Chairman.
22 You know like my colleagues, I'm very glad that we're having
23 this Conference and that we have the opportunity to hear
24 from so many people in the industry about what's going on,
25 how they've handled the issues.

1 And I think it's going to be very information and
2 help guide us as a Commission to better understand and make
3 better policy decisions. One of the things I wanted to
4 observe however, is how impressed I have been and how the
5 different energy industries and utilities have been able to
6 handle this crisis.

7 Clearly, many of them were prepared for a crisis,
8 but also clearly, nobody was expecting to have this
9 particular crisis. Now I've been very impressed at the
10 adaptability that so many of these companies and utilities
11 and individuals have made to be able to handle this.

12 I also need to say that I've been very impressed
13 with how well FERC has handled this. The staff has been
14 spectacular. The preparation by our IT department Executive
15 Director to make sure that we could function remotely has
16 been really impressive.

17 And so I applaud everybody at FERC
18 for what they've done. But once again, we are just the
19 regulators and it's really the people out there, the people
20 that are either working on the lines, the administrators,
21 those who are managing the companies, the CEO's who are
22 trying to make sure that the capital is there to keep on
23 operating.

24 They're the ones who are actually making our
25 system work. As we go through the process though, there

1 are a few things that I'm going to be interested in hearing
2 about. First of all, I'm going to be very interested in the
3 issues of cyber, cyberattacks, cyber infiltration and how
4 we're handling and how our adversaries may be trying to take
5 advantage of us and are we properly prepared and what more
6 should we be doing.

7 I also think that infrastructure is going to be a
8 very important topic. It's very important for us to
9 continue to look not just at the short-term issues about do
10 we have the infrastructure to keep providing the electrical,
11 natural gas and oil system that's needed to keep the
12 operation of the country now, but are we continuing to work
13 for tomorrow?

14 One day we are going to come out of this crisis,
15 and we want to be in a position where we're able to take
16 advantage of it. The benefit of customers, whether they be
17 residential, commercial, industrial, but also for the
18 benefit of the United States to be able to take advantage of
19 a world that will hopefully turn into a strong growth mode
20 and for us to be able to provide the energy to power the
21 world and to be able to use that and provide the tools to
22 policymakers so that we can be in a strong position,
23 vis- -vis our adversaries such as China, Russia, and Iran.

24 I think these are important things because during
25 any crisis it's easy to focus on just what we need to get

1 through today, but we also need to think about how are we
2 going to deal with tomorrow and take advantage of those.
3 I'm confident that the United States is going to be able to
4 be strong, that we'll carry through this crisis and that we
5 will continue to be able to be a strong beacon of not only
6 economic strength but of liberty throughout the world.

7 And I'm looking forward to hearing about the
8 various individual aspects of how the companies have been
9 handling the issues that have come with the COVID crisis,
10 and also what they think we should be doing for the future.
11 Thank you Mr. Chairman, and thank you to all the panelists
12 for joining us.

13 CHAIRMAN CHATTERJEE: Thank you Commissioner
14 McNamee. Commissioner Danly?

15 COMMISSIONER DANLY: Thank you Mr. Chairman. I
16 don't have any opening statement except to thank everybody
17 for their attendance at the Conference.

18 CHAIRMAN CHATTERJEE: Thank you Commissioner
19 Danly. I'll turn it over to Aileen.

20 MS. RODER: Thank you Mr. Chairman. We'll now
21 start our first panel, which is entitled System Operations
22 and Planning Challenges. Each panelist will introduce
23 themselves and have the opportunity to give an initial
24 opening statement of no longer than four minutes.

25 Afterwards, we will begin the question and answer

1 session. Just to let folks know, I will be calling for a 15
2 minute break partway through the first panel today. As we
3 begin with opening remarks, I will remind all participants
4 to refrain from discussing any open contested proceeding.

5 If anyone engages in these kinds of discussions,
6 we will unfortunately have to interrupt them and ask them to
7 move to a different topic. I will call each panelist in
8 turn. Once the previous panelist finishes his or her
9 remarks. And so to start things off, we have Michael
10 Bryson, senior Vice President of Operations at PJM. Please
11 go ahead Mr. Bryson, thank you.

12 MR. BRYSON: Good morning. Chairman Chatterjee,
13 Commissioners, fellow panelists, thanks for having me on
14 this panel. My name is Mike Bryson, I am responsible for
15 PJM's system operations. I am very pleased to provide this
16 opening statement to briefly outline how PJM Operations and
17 even the larger PJM community have managed through the
18 operating challenges brought on by this pandemic.

19 I would also like to acknowledge the
20 extraordinary contributions and collaboration by our PJM
21 staff, our members, state commissions, even law enforcement,
22 public health officials and all of our industry and
23 regulatory partners during this pandemic.

24 Although the COVID Pandemic was certainly not
25 foreseeable, planning and operating through a pandemic was

1 not a totally new subject to PJM and the rest of the
2 industry. Our own pandemic plan was adopted in 2006 and we
3 participated on that team that drafted the 2010 NERC report,
4 which was designed to provide guidance to the industry.

5 Over the years we've had some opportunities to
6 exercise this plan in small ways in 2008 and again with
7 SARS. PJM drew on this previously developed pandemic plan
8 to secure our system operations and handle all of the
9 evolving impacts to our employees and our stakeholders
10 health issues, and we focused on information sharing and
11 really responding to member needs all in consultation with
12 an epidemiologist and our local public health officials.

13 The epidemiologist, by the way, was one of many
14 ideas that we got from New England ISO. One of the primary
15 focus areas as I think all of us will talk about was really
16 protecting our control room operations. We did that by
17 establishing a third sequestered fully operational control
18 room manned by a team of operators which were living on site
19 around the clock and we did that for about 11 weeks, just
20 recently the operators came out of sequestration.

21 I would also like to highlight how much we
22 learned about control room operation best practices through
23 the ESCC and equity participation, as well as the
24 sequestration best practices from Con Edison and New York
25 ISO. Since mid-March PJM has observed some significant

1 reductions in our electricity peaks and overall electricity
2 use, mostly related to the shutdowns, some government
3 restrictions and also just change in consumer behavior.

4 In all, daily peak demand fell between 8 and 10
5 percent in April, accelerated to between 12 and 14 percent
6 during the first half of May. Moving forward the pandemic
7 experience has changed how we operate. We plan to continue
8 to maintain our third control room and are in the process of
9 setting up a new operator simulator to look to get training
10 simulation back on track as soon as possible.

11 We established and will continue to maintain our
12 bench operator program which creates a remote operator
13 support based on job task analysis to be prepared for any
14 extreme impacts which may happen in the future.

15 PJM's view of the threat landscape, particularly
16 from a cyber perspective, COVID brought increased phishing
17 emails with things related to the pandemic. PJM will
18 continue to maintain all of its normal cybersecurity
19 operations and continue to work with its government and
20 commercial partners to get up to date cybersecurity threat
21 intelligence information.

22 We will also continue to focus on our short-term
23 and long-term load forecast. In the short-term, the summer
24 has proved a bit challenging. It's been a bit challenging
25 trying to estimate that mix between increased residential

1 mode and some level of increased commercial and industrial
2 activity.

3 We are seeing some high peak loads the past few
4 days due to warmer weather, and we will continue to analyze
5 the impacts of the pandemic on the loads we are
6 experiencing. Thank you again for the opportunity to be
7 here today.

8 MS. RODER: Thank you very much Mr. Bryson. Next
9 up we have Timothy Cawley, President of Consolidated Edison
10 Company of New York. Please go ahead Mr. Cawley.

11 MR. CAWLEY: So good morning. As mentioned, Tim
12 Cawley, President of Con Ed of New York. On behalf of Con
13 Ed, I want to thank the Federal Energy Regulatory Commission
14 for inviting me to this discussion. I'm very much looking
15 forward to it.

16 So the COVID-19 crisis is a historical challenge
17 for Con Edison and New York City and while we are far from
18 past the pandemic, our city and region are in the process of
19 recovering. There's no overstating how severely we were
20 hit. Places that make New York the world capital of culture
21 and commerce, the great restaurants, museums, schools,
22 houses of worship were eerily empty and dark instead of
23 bustling with New Yorkers and excited tourists.

24 At our low point, nighttime traffic was so light
25 that the only constant sound was sirens on ambulances

1 carrying victims. It was clear before the virus hit the
2 United States that reliable energy service would take on an
3 even grater importance. Hospitals and first responders
4 needed Con Edison's industry-leading reliability to perform
5 their critical work of treating victims.

6 We formed a pandemic team about 10 years ago and
7 as the pandemic hit we quickly assembled that team to gather
8 information, communicate with employees and to plan our
9 response. As we do with every task, we went right to our
10 core principles -- safety, operational excellence, and the
11 customer experience.

12 Safety is always first for us, so we moved on
13 that right away. We halted non-essential visits to customer
14 properties. This meant a suspension of meter reading, smart
15 meter installations and energy efficiency visits and other
16 customer contacts.

17 We took steps to protect our employees, setting
18 up temporary reporting locations and staggering shift start
19 times for social distancing. We sequestered some bulk power
20 control room personnel to ensure availability of these
21 critical employees.

22 Our workers showed their talents and dedication
23 by quickly establishing electric service for temporary
24 hospitals created to treat the expected wave of coronavirus
25 patients. Some 8,000 employees who typically work in our

1 offices began working very efficiently from home.

2 The health crisis has painful economic
3 consequences for many of the customers due to the necessary
4 New York Pause order. To help, we suspended service
5 turnoffs for non-payment and stopped adding new late fees to
6 customer accounts. Bad actors will seize any opportunity to
7 do harm, so we took action to protect our information
8 systems.

9 An alert workforce is a great defense against
10 cyber threats, so we provided daily messaging to keep
11 everyone focused on security and privacy. We've seen an
12 increase in vendors targeted by ransomware and email
13 compromise attempts. In these cases, we follow a strict
14 process to disable communications between our users and the
15 compromised vendor until security is ensured.

16 We're grateful for the willingness of fellow
17 energy companies, industry associations and other
18 stakeholders to share information on best practices with us.
19 It made a very difficult task a little bit easier. The
20 timing of the crisis presented another challenge for us.

21 As a summer-peaking utility with most of our
22 customers served by an underground system, we prepares for
23 summer year-round. We were well into that process when it
24 became clear the health crisis was coming to our area in a
25 forceful way.

1 Our analysis showed that while overall energy
2 usage would drop due to decreased office and commercial
3 demand, usage in certain residential areas would increase.
4 That analysis informed our strategy for this summer and we
5 are ready to address this load shift.

6 A health crisis -- particularly a respiratory
7 illness, points out the importance of a clean environment.
8 We think clean energy will be an economic driver as we
9 recover from the impact of the virus.

10 Here's something many people likely don't know --
11 through our Clean Energy Business, Con Ed is the second
12 largest solar producer in North America and the seventh
13 largest producer in the world. So we consider ourselves
14 leaders in the transition to this clean energy economy.

15 As our city and region recover, Con Edison must
16 maintain financial integrity to fulfill our integral role in
17 restoring economic vibrancy, helping to meet climate goals
18 and providing benefits for our communities.

19 We are likely to see more people across the
20 economy working from home. This might provide an
21 opportunity for energy companies and regulators to add value
22 to their residential energy efficiency programs.

23 The work of our industry is powering ventilators,
24 first responder facilities and other emergency equipment is
25 critical. Coming out of the pandemic, customers are likely

1 to have even higher expectations when it comes to
2 reliability.

3 Energy companies, regulators and other
4 stakeholders will have the responsibility of investing
5 adequately and wisely in infrastructure to meet these
6 increased expectations. I'm confident we're up to that
7 challenge. Thanks for your time, look forward to the
8 discussion.

9 MS. RODER: Mr. Cawley, thank you so much. We
10 now have Stan Chapman, Executive Vice President and
11 President of U.S. Natural Gas Pipelines for TC Energy and
12 Chairman of the Interstate Natural Gas Association of
13 America. Mr. Chapman please go ahead.

14 MR. CHAPMAN: Good morning everybody and thank
15 you Chairman Chatterjee, Commissioners McNamee, Danly and
16 Glick. I appreciate the opportunity to address you all
17 today. My name is Stan Chapman and I am the Executive Vice
18 President and President of U.S. National Gas Pipelines at TC
19 Energy, which is one of North America's largest energy
20 infrastructure companies.

21 I also serve as the Chairman of INGAA, the
22 Interstate Natural Gas Association of America. And as INGAA
23 Chair, I represent over 25 member companies which really
24 provides me with a broad overview of our nation's critical
25 midstream infrastructure as we continue to safely deliver

1 the natural gas that millions of Americans rely on every
2 single day to live their lives and to do their jobs.

3 Amid this global public health crisis, it's
4 important to highlight how the transmission of natural gas
5 through our nation's underground pipeline network is safely
6 and reliably bringing stability to our nation.

7 As many businesses across the U.S. closed their
8 doors over the past several months, our employees never
9 stopped working. These men and women are recognized by the
10 federal government as a critical workforce, the Department
11 of Homeland security's Cybersecurity and Infrastructure
12 Security Agency listed pipelines as one of the 16 critical
13 infrastructure sectors that are I quote, "Considered so
14 vital that their incapacitation or destruction would have a
15 debilitating effect on security, national economic security,
16 national public health or safety, or any combination
17 thereof."

18 Across the country, pipeline operators work
19 quickly to implement COVID-19 response and recovery plans
20 that incorporate the guidance of CDC, OSHA and other local
21 and state agencies. Our industry developed, through the
22 INGAA Foundation, a publicly available guidance document
23 that effectively synthesizes practices the pipeline industry
24 is using to prevent and control the spread of COVID-19
25 during construction and maintenance work.

1 In the cases of TC Energy, nearly 2,000 field
2 workers across 40 states continued to report for work along
3 with more than 70 gas controllers, many of whom were
4 sequestered away from their families and friends for
5 extended periods of time. These individuals dutifully
6 answered the call and helped underpin the work of essential
7 health services.

8 With our industry workforce performing its
9 essential work, doctors and hospitals were able to treat
10 their patients, manufacturers were able to produce more
11 medical equipment and PPE and millions of others were able
12 to maintain their productivity by converting their homes
13 into offices as natural gas, which accounts for 38 percent
14 of electric generation, continued to be a safe, reliable and
15 affordable energy source.

16 While there was understandably some initial
17 confusion between local, state and federal guidelines with
18 respect to what was or wasn't considered an essential
19 service, differences were quickly resolved and many of the
20 communities where we operate recognize the value in what we
21 do.

22 Throughout this time, we have been able to
23 support local businesses, such as hotels and restaurants and
24 emergency medical services through our gas control
25 sequestration, construction and maintenance projects. Many

1 of these small business owners have expressed their
2 gratitude and emphasized that without our ongoing work, they
3 would have had to furlough most, if not all, of their
4 employees.

5 What our employees do is a duty, and we're really
6 proud to serve. The natural gas community has worked
7 tirelessly to prepare contingency plans for this crisis.
8 That planning has prepared us well for the COVID-19
9 challenge that we face today. Through established
10 continuity plans, coordination along the natural gas value
11 chain and collaboration with government agencies, the
12 industry is prepared for a range of emergency scenarios.

13 Health and safety process and procedures are a
14 way of life for our industry. While we do not know what
15 the future will bring, you can rest assured that we will be
16 well prepared.

17 Perhaps now, more than ever, what we need in
18 these uncertain times, and what the Commission can help
19 deliver, is a stable and predictable regulatory climate.
20 When I started in this industry more than 30 years ago, it
21 took no longer than five months to secure a certificate for
22 a pipeline expansion. Now, it routinely takes a year or
23 long and once that certificate is received, it's no longer
24 the start of the construction process, but the start of a
25 whole new set of challenges.

1 Our nation is blessed with an abundance of
2 resources, including cleaner burning natural gas. The
3 continued production of these resources in a safe and
4 environmentally efficient manner will not only continue to
5 reduce energy costs for millions of U.S. consumers, but it
6 will drive economic prosperity through the creation of real
7 jobs that pay a living wage, enhance our domestic security
8 by reducing our nations reliance on energy imports from
9 volatile regions across the globe, and strengthen the
10 security of our allies abroad as we continue to export LNG
11 and the related energy products.

12 I am an optimist. I believe that we will emerge
13 from the pandemic we currently face stronger and smarter. I
14 believe that what we do collectively -- that is deliver the
15 energy that millions of individuals rely on every day to
16 live their lives and do their jobs, will be needed for many,
17 many decades to come. And I believe that the Commission, by
18 ensuring a stable, predictable regulatory climate, can
19 create an environment of energy and economic prosperity for
20 our country to ensure we continue to meet the challenges at
21 the frontline, just as we are doing right now. Thank you
22 very much.

23 MS. RODER: Thank you very much Mr. Chapman. We
24 now have Stan Connally, Executive Vice President of
25 Operations at Southern Company. Please go ahead Mr.

1 Connally.

2 MR. CONNALLY: Well good morning, thank you.
3 Commissioners, Mr. Chairman, thank you for the opportunity
4 to be here today. I'm Stan Connally, the Executive Vice
5 President of operations at Southern Company and again we
6 really appreciate the opportunity to speak with you today.

7 I've heard from several of you during this
8 pandemic as we participate in industry calls and your
9 support for what we do is very much appreciated and noticed
10 as we work together to navigate everything that's in front
11 of us around this pandemic.

12 Southern Company is one of the largest energy
13 providers for our country and we operate seven regulated
14 utilities serving 9 million natural gas and electric
15 customers across six states. We also have a competitive
16 generation business. It's also involved in that transition
17 we talk about with our energy generation, our transition to
18 you know, a different form of serving our customers going
19 forward.

20 We also have a nationally recognized provider of
21 customized energy solutions and distributed energy
22 infrastructure that is valuable to many of our customers
23 today as they think about resilience going forward. But
24 please understand across all those businesses, keeping the
25 customer at the center of everything we do really is the

1 focus for us and that hasn't changed, even across this
2 pandemic.

3 I get the pleasure of working with 28,000
4 teammates who are totally committed to serving customers and
5 communities. We get the privilege to serve. We recognize
6 our awesome responsibility to deliver safe, clean, reliable
7 and affordable energy, even in complex times like this.

8 But that's built on our core values. And in
9 particular two of those core values, safety first, and total
10 commitment really have guided our response to the COVID-19
11 Pandemic.

12 Certainly it starts as several of you have
13 already heard, with keeping our employees safe and healthy.
14 It's an absolute predicate to making sure we can continue
15 reliably serving our communities. But also our ability to
16 serve those communities is built on deep collaboration --
17 collaboration across the industry and collaboration with our
18 regulators, and we're very thankful for the hard work and
19 attention of our local state and national regulators,
20 including this Commission.

21 I think in complex terms it's important that we
22 keep things as simple as we can, and your hard work has
23 given us the ability to focus. It's also given us the
24 stability we need to continue operating again in these
25 complex times.

1 We talked about it as you know well, utilities
2 and service we provide really is essential to powering our
3 nation's economy. And we have never stopped working to
4 achieve that end during this pandemic. We recognize again
5 that awesome responsibility to keep the energy flowing and
6 we've been very successful at Southern Company in adapting
7 our normal operating plans to keep the lights on and keep
8 the gas flowing.

9 But that's built on our -- on years of
10 preparation really and attention to our people. I think it
11 was Commissioner Glick that acknowledged the men and women
12 on the front lines, their training, their preparation, their
13 attention to safety and health is an important element of
14 our planning for times like this.

15 Flexibility business continuity plans is another
16 area that we have all focused on, we've collaborated on. It
17 needs to be a focus for us going forward with lessons
18 learned. Having resilient infrastructure and systems that
19 support that infrastructure certainly has borne its fruit
20 during this pandemic.

21 You know, we've had the opportunity to test and
22 improve the resilience of those systems. And we're proud to
23 say they've been very successful. And then lastly our
24 ability to draw funds during these unusual times, the access
25 to credit markets and financial markets really is another

1 important thing to do and we have done during this time, and
2 I look forward to discussing more about those critical
3 elements during this panel.

4 Look, I want to acknowledge the important
5 industry collaboration that I mentioned earlier. We worked
6 very closely at Southern Company across the Electric
7 Subsector Coordinating Counsel, or ESCC for short. Other
8 groups like the North American Transmission Forum, American
9 Gas Association, Southeast Electric Exchange here locally
10 for us, all of us together have exchanged protocols, plans,
11 leading practices, and I truly believe that's made us all
12 stronger as we respond to this pandemic.

13 One example of that is the development of an ESCC
14 resource guide that really has served as a valuable tool to
15 utilities really across North America. I had the pleasure
16 of serving alongside several other leaders from the
17 Secretary of the ESCC to help facilitate that industry-wide
18 discussion and it's been very rewarding, and I think also
19 very valuable to our customers as we have navigated this
20 pandemic.

21 At Southern Company, all responsible re-entry
22 plan have been informed by our own business continuity
23 experts, our medical experts, we've stayed very close to,
24 but also that industry collaboration has helped informed our
25 own re-entry plans and we think will make us smarter and

1 more effective as we navigate again in the months ahead.

2 Let me lastly say we're indeed grateful for this
3 Commission and the hard work you've done thus far to support
4 our industry with constructive regulation during this
5 pandemic. I mentioned earlier your focus has helped us stay
6 focused and helped us focus on stability of our business and
7 serving customers.

8 These uncertain times have proven the value of
9 that. Thank you for that. And we just ask for your
10 continued partnership to minimize any operational or
11 economic impact on our customers as we move forward and to
12 keep us focused on those key priorities.

13 Thanks again for the opportunity to participate
14 today. I look forward to answering your questions alongside
15 my panelists. Thank you.

16 MS. RODER: Thank you very much Mr. Connally.
17 Next up we have Eric DeBonis, Senior Vice President of
18 Operations at Southwest Gas Corporation. Please go ahead
19 sir.

20 MR. DEBONIS: Well good morning Chairman
21 Chatterjee, Commissioners Glick, McNamee and Danly. My name
22 is Eric DeBonis and I am Senior Vice President of Operations
23 for Southwest Gas Corporation. Southwest provides natural
24 gas service to over two million customers in Nevada, Arizona
25 and portions of California. thank you for inviting me to

1 participate in this very important Technical Conference.

2 Throughout the COVID pandemic, America's natural
3 gas distribution network continues to be safe and reliable.
4 Systems that have been -- have remained fully operational,
5 and natural gas has continued to flow to our country's over
6 71 million customers. Half of all Americans depend on
7 natural gas as energy to fuel their homes and businesses.

8 This includes hospitals, grocery stores and other
9 vital services that are critical to the nation's pandemic
10 response. It also includes making sure people have heat,
11 hot water and cooking when they are sheltered in place.
12 They're counting on us now more than ever, and I'm proud to
13 say that the natural gas industry is delivering.

14 Natural gas companies across the nation are
15 committed to protecting their employees and customers.
16 Companies have changed policies and procedures to prevent
17 the spread of COVID 19 and to provide reassurance to
18 employees and customers that their health and safety are
19 always the most important consideration.

20 Utilities are closely following the CDC's
21 guidelines and are using this information in developing and
22 adjusting company policies and procedures. Utility
23 personnel have been designated as essential critical
24 infrastructure workers. This designation has afforded us
25 the ability to continue responding to the needs of

1 customers, which includes emergency response activities
2 which may require us to enter a customer's home.

3 Utility personnel have been provided the
4 appropriate personal protective equipment such as masks,
5 gloves, protective suits and coverings, soap and hand
6 sanitizer to mitigate the threat of contamination. Natural
7 gas utilities have deferred certain work activities, which
8 do not diminish safety, that would otherwise have put
9 utility workers in direct interface with customers.

10 For example, energy audits, meter reading and
11 meter maintenance and other non-safety related work that
12 would require a natural gas worker to enter a home or
13 building have been delayed since the onset of the pandemic.

14 Gas distribution utilities recognized early on
15 that many of our customers would face financial
16 difficulties, so they took immediate action. Utilities
17 across the country suspended late fees and service
18 disconnections for non-payment, reconnected those who had
19 been disconnected, and offered bill assistance for those
20 struggling to keep up.

21 Furthermore, most large utilities have made
22 significant contributions to local fundraising efforts in
23 order to provide support for individuals in need. Utilities
24 such as Southwest Gas Corporation, have taken various
25 measures to ensure the energy systems remain safe and

1 reliable. In addition to elevated personal protective
2 equipment for our gas company emergency responders, we have
3 gone all out to protect our system controllers from exposure
4 to COVID.

5 Gas controllers are responsible for quickly
6 identifying any abnormal operating conditions such as drops
7 or increases in pressure at regulatory stations or along the
8 pipeline which could reflect a pipeline failure. These
9 real-time pressures are monitored by controllers in a
10 centralized location.

11 Natural gas utilities have taken aggressive
12 actions to clean control rooms, perform temperature
13 screening and restrict access to other company employees.
14 The natural gas industry understands additional challenges
15 lie ahead, given that many areas are seeing a rise in COVIC
16 cases and most medical authorities are predicting a second
17 wave for the virus to occur in the fall.

18 Similar to other industries, we have been
19 studying leading practices used for possible re-entry of
20 office workers who have a compelling need to be back in the
21 office. Field personnel continue to use protocols which
22 enable social distancing and minimize large group
23 interactions.

24 Natural gas utilities will also continue
25 collaborating with public safety officials to ensure that

1 our communities have a broad net of capable first responders
2 who can respond to any type of large-scale incident.

3 Finally, our industry will continue to use
4 technology here it can be effectively used to reduce larger
5 gatherings. For instance, utilizing virtual training and
6 virtual meetings will continue to be used across the
7 industry. Thank you again for inviting me to speak today.
8 I look forward to continued discussions on how the natural
9 gas industry is responding to the pandemic.

10 MS. RODER: Thank you very much Mr. DeBonis.
11 Mike Haynes, Chief Operating Officer of Seattle City Light
12 is not going to give a formal statement today, but I wanted
13 to give Mr. Haynes an opportunity to introduce himself and
14 his organization. Please go ahead.

15 MR. HAYNES: Thanks Aileen and good morning
16 everybody. Really happy to be here this morning from the
17 State of Washington and representing the City of Seattle.
18 Seattle City Light is a municipally owned utility that
19 operates over 2,000 megawatts of hydropower.

20 I'm really pleased to be here this morning and I
21 look forward to discussion. So thank you Chair, and thank
22 you Commissioners for hosting this. I really appreciate it,
23 looking forward to the discussion.

24 MS. RODER: Thank you very much Mr. Haynes. Next
25 up we have Shawn Lyon, President of Marathon Pipe Line and

1 Vice President of Operations of MPLX. Please go ahead.

2 MR. HAYNES: Good morning. This is Shawn Lyon,
3 President of Marathon Pipe Line and I too, like everyone
4 else, want to thank Chairman Chatterjee, the Commissioners
5 and FERC staff for putting on this discussion.

6 And it's a great opportunity for us to share how
7 the COVID-19 emergency has impacted the oil pipeline
8 industry and the Marathon Pipe Line. Recovering from this
9 pandemic will be a journey for everyone in the energy
10 industry, and meetings and discussions like this, where we
11 can all come together is part of the next step.

12 Marathon Pipe Line controls operations
13 approximately 10,000 miles of crude oil, refined petroleum
14 projects and LPG pipelines in 25 states via three pipeline
15 operations centers in California, Texas and Ohio. Every day
16 24/7 365, approximately 700 front line workers manage
17 Marathon Pipe Line's operations on the ground and within our
18 operations centers.

19 Another 500 employees who normally work in our
20 offices but who work from home during the pandemic, are
21 slowly transitioning back to the office as we speak. We're
22 approximately about 50 percent back at the office today.

23 While COVID-19 caused us to make alterations to
24 how we complete our work, it did not and let me reiterate it
25 did not alter our mission to safely and reliably operate

1 pipelines. In fact, it only strengthened our resolve.

2 When the pandemic hit, we reacted swift and
3 quickly with detailed protocols across our enter enterprise.
4 An incident command structure was set up that we drill on
5 for many, many times for many years. Remote work guidelines
6 quickly went into effect.

7 We procured and distributed PPE (masks and
8 sanitizers and cleaning supplies), which as you all know was
9 a challenge due to incredibly low availability across the
10 nation. We limited on-site personnel in our pipeline
11 operation centers to reduce exposure and ensure the safety
12 of that mission-critical portion of our business. In fact,
13 we didn't even allow manager supervisors in that work
14 space.

15 We implemented health screening, social
16 distancing and kept the size of crews and contractors
17 minimal and lastly, we maintained an open line of
18 communication to inform, education, reinforce and uplift our
19 entire workforce.

20 In fact, some of the most positive feedback we
21 got from our employees was keeping the open lines of
22 communication that we had at least twice a week with all
23 employees across our enterprise.

24 Due to these actions and our strong safety
25 culture instilled in our 1,200 employees, I am happy to

1 report that Marathon Pipe Line has only had one confirmed
2 case of COVID-19. And actually we just got that this past
3 week from a family member of an employee, so we put
4 protocols in place to ensure it didn't spread.

5 We did this not only to protect our people, but
6 to protect our pipeline operations so that we can fuel the
7 nation when our first responders, our healthcare
8 professionals and front line workers need us the most.

9 And I think a great example of that resolve is we
10 had an employee of a front line technician down in Louisiana
11 who worked tirelessly to make sure our pipelines are operating
12 safely and reliably. While his wife, who is a registered
13 nurse, was at a COVID wing at a local hospital. He set up a
14 camper trailer in his driveway to help protect his wife and
15 give her a safe place for his wife to clean up before she
16 goes in the house to be with her daughter.

17 So he provided the energy and fuel for her to be
18 on the nation's frontline to help the people who were in the
19 most dire need due to this COVID Pandemic. A truly
20 inspiring story.

21 As guardians of public safety, it's our duty to
22 maintain safe and reliable operations not only for our
23 people but for the people who live and work along the
24 pipeline, regardless of pandemics or other emergencies that
25 may occur. All 10,000 miles of our pipelines remained

1 operational during the COVID-19 emergency.

2 Our in-line inspection tool runs, our damage
3 prevention and rights-of-way activities, maintenance
4 activities, safety and regulatory requirements -- all these
5 mission-critical activities continued without interruption.
6 In some cases, we had to think creatively and find a new way
7 to get the job done safely by asking "How can we?"

8 For example, we modified our valve hydrotest
9 inspection process to witness via video conference instead
10 of in-person at the valve vendor's shop. This is just one
11 example of finding different ways to perform necessary
12 activities to ensure safe and reliable operations continue.

13 We also evaluated non-mission-critical activities
14 to determine which could be deferred due to COVID-19. Some
15 proactive maintenance activities were rescheduled, and some
16 scheduled projects were delayed to limit the number of
17 contractors at any given site.

18 On the front the steep decline in demand for
19 crude oil and refined products due to the economic
20 conditions stemming from the pandemic resulted in
21 industry-wide throughput reductions and lost revenue, which
22 is still ongoing today. We have updated our 2020 business
23 plan to reflect the current challenges by looking for
24 opportunities to reduce our spending levels while still
25 operating in a safe and reliable manner.

1 Our pipelines do not charge cost of service
2 rates, but rely heavily on indexing, as do most in the oil
3 pipeline industry. COVID-19 means there are many costs
4 that will not be recovered due to reduced revenue.

5 And the domino effect created by the COVID-19
6 emergency has rippled through the entire energy sector, and
7 we'll be feeling the effects for some time. As we all work
8 to return to some type of normalcy, I'm fortunate to be here
9 with all of you to share the impacts and seek solutions.

10 As Chairman Chatterjee said, "We're all in this
11 together." And I think that's exactly what's happening
12 today, that we're all in this together discussing what we
13 can do. So thank you for allowing me and Marathon Pipe Line
14 to be a part of this important conversation.

15 MS. RODER: Thank you so much Mr. Lyon. And our
16 next panelist is Jim Robb, President and Chief Executive
17 Officer of North American Electric Reliability Corporation.
18 Please go ahead Mr. Robb.

19 MR. ROBB: Okay, thank you very much. Mr.
20 Chairman and excuse me, members of the Commission, I
21 appreciate being invited to participate in this Technical
22 Conference this morning. As we navigate the ongoing health
23 crisis, NERC has tried to serve a vital role in addressing
24 the pandemic risks to North America's interconnected grid.

25 In many ways I think our work has never been more

1 critical and I have to say that I'm very aware of how well
2 the ecosystem of industry stakeholders, government partners,
3 including the Commission and the ER enterprise have come
4 together to ensure a reliable supply of electricity to meet
5 society's critical needs.

6 Because pandemics are people events, mitigation
7 requires keen focus on supporting the continuity of
8 workforce and supply chain. The risks we focused on at NERC
9 included potential shortages of critical staff, insuring
10 system operations and control room continuity, preparation
11 for the summer peak operating season, navigating typical
12 summer challenges under heightened uncertainty and
13 regrettably, increased cyber risk.

14 These threats are significant and real and yet
15 I'm pleased to report that the industry has successfully
16 risen to the challenge, coordinating effectively with
17 government partners and taking aggressive steps to confront
18 significant new risk. Throughout the crisis thus far, we
19 have not observed any degradations to reliable operation of
20 the BPS.

21 Our efforts at NERC are focused on three primary
22 areas -- heightened situational awareness, active
23 coordination with government partners and industry, and use
24 of regulatory discretion. Even before the World Health
25 Organization and the Centers for Disease Control indicated

1 significant pandemic risks related to the coronavirus, we
2 identified potential issues on the horizon and in early
3 February, the E-ISAC in an all points bulletin alerting
4 companies of potential operational and security impacts of
5 the pandemic conditions, and recommended that utilities take
6 steps to prepare for the possibility of severe workforce and
7 supply chain constraints.

8 On March 10th we issued a Level 2 alert
9 concerning industry preparedness for pandemic. While
10 responses from that alert found that pandemic planning
11 across the workforce and supply chain was pervasive across
12 the industry. Two-thirds of respondents said they would be
13 prepared to support mutual aid request if asked.

14 Responses also identified other risk factors such
15 as impacts through construction and maintenance delays. In
16 April, NERC issued a special report reviewing reliability
17 considerations and operational readiness. That report found
18 no degradation in the reliable operation of the BPS.
19 However we noted that prolonged periods of operator
20 sequestration and deferred maintenance increases the impact,
21 industry's risk profile and will continue to do so as we
22 enter the critical summer months and as it appears now,
23 potentially for longer periods of time.

24 Coordination with industry and government has
25 been another critical focus area. NERC continues to convene

1 weekly calls with reliability coordinators across North
2 America. These meetings provide a forum for the RC's to
3 share their experiences and best practices, and to
4 coordinate activities and thus far, the RC's have reported
5 success in navigating all the challenges presented to them
6 with no reliability impacts on the system.

7 Through the ESCC, as Stan Connally mentioned,
8 NERC participates in ongoing coordination calls with
9 government partners, EOE, DHS, Health and Human Services,
10 and the CDC in support of the tiger teams working on
11 cost-cutting industry issues, including the development of
12 the resource guide that Stan mentioned.

13 We also worked with the North American
14 Transmission Forum, Department of Energy, and with FERC to
15 develop a pandemic response plan resource to help utilities
16 create, update and formalize their pandemic plans. That
17 document is available on the NATF website and it's gotten
18 very good, very good reviews from folks who have used it.

19 And then finally working with the Commission,
20 NERC has exercised targeted regulatory discretion to help
21 industry stay focused on the immediate reliability and
22 security needs in front of them. Areas of discretion we
23 employed included guidance advising registered entities that
24 we would consider the impacts of the pandemic in evaluating
25 any non-compliance with reliability standards.

1 Temporary suspension of in-person compliance
2 activities and then finally deferral with certain new
3 standards requirements that were scheduled to come into play
4 in the second half of 2020.

5 Throughout all this though, the ERO enterprise
6 remains focused on a core mission -- work on supply chain
7 and other standards is continuing. Through innovation, the
8 regional entities have, with the support and cooperation of
9 registered entities, performed remotely many oversight
10 activities that normally would require a physical presence
11 on site.

12 In closing, I'd like to thank the Commission for
13 a strong working relationship and the support the Commission
14 has provided us. I think the partnership between NERC and
15 FERC has rarely performed better, and at the same time while
16 providing regulatory relief, we haven't taken our eyes off
17 of any balls, and the reliable performance of the grid under
18 significant organizational stress demonstrates that.

19 So thank you again for the opportunity to be here
20 and I look forward to the ensuing discussion.

21 MS. RODER: Thank you very much Mr. Robb. And
22 thank you to all the panelists. We're going to now move
23 into the question and answer session. Just a few things.
24 If a panelist would like to answer a question, you can
25 either use the webex raise your hand function, or

1 alternatively if you're having -- wanting to do something
2 else, you can just say your name and I will call on each
3 panelist that would like to respond in turn.

4 One kind of thing to note is turn on your mic and
5 respond to the question and turn off your microphone when
6 you have completed the response. With that, I will now turn
7 it over to Chairman Chatterjee for his questions. Please go
8 ahead.

9 CHAIRMAN CHATTERJEE: Thank you to all the
10 panelists for your participation today and for your remarks.
11 I want to begin I guess reflecting on a point that a number
12 of you eloquently made about the work in factor prices that
13 energy sector workers across the board have put in to get us
14 through this pandemic and I thought it was particularly
15 insightful to talk about the sacrifices that families have
16 made, families of energy sector employees.

17 And so I want to start for everyone listening, to
18 give my heartfelt and grateful thanks for the contributions
19 that folks are making. A number of you spoke about various
20 challenges to system restoration efforts given the
21 precautions necessary during the pandemic. What additional
22 challenges have you experienced, or do you foresee due to
23 the ongoing response to COVID-19 during emergency
24 restoration for seasonal events such as hurricanes and wild
25 fires.

1 So if folks want to raise their hand and answer
2 that I'll greatly appreciate it.

3 MS. RODER: Thank you Mr. Chairman. Stan
4 Connally has his hand raised. Go ahead Mr. Connally.

5 MR. CONNALLY: Oh thank you. Thank you for that
6 question Mr. Chairman. Certainly, I think we're in the
7 midst of hurricane season right now. It's something the
8 Southern Company and the utilities around us having a great
9 deal of experience of planning for and executing on behalf
10 of our customers.

11 Certainly, there will be new challenges to how we
12 respond to those natural disasters. And back to your first
13 point, making sure we can keep the men and women on the
14 frontlines safe and healthy really comes at -- really is the
15 heart of some of those new challenges. We have worked very
16 closely together, particularly across the southeast electric
17 exchange, but really nationally across all of the regional
18 mutual assistance groups to think about what new protocols
19 we really need to implement during those responses.

20 If you think about it -- I know many of you as
21 Commissioners have witnessed these responses. You think
22 about thousands of men and women coming together to respond
23 to those natural disasters and we have typically housed,
24 trained, oriented, you name it, fed, those men and women in
25 very centralized ways. There's efficiencies that come with

1 that, but obviously that brings some risks to health and
2 safety in our current pandemic.

3 So our new protocols really focus on
4 decentralizing those operations, making sure that we take
5 advantage of the technology that you've heard many of us
6 speak to here recently on how we orient workers coming to
7 our territory. We can do that virtually. We can do safety
8 briefings virtually.

9 We're working hard and our plans are to provide
10 for single occupancy for those men and women versus you
11 know, multi-occupancy hotel rooms or tent cities as you've
12 seen us establish in the past. Again, in support of making
13 sure we can keep people as socially distanced, if you will,
14 as we can during these pandemics or during these responses.

15 I would also say that getting the material to the
16 men and women needs to take on new methods, rather than them
17 coming for example, to centralized locations to get that
18 material, we plan to distribute it to them in smaller
19 segments of the territory that we're looking to restore.

20 So those are some examples of the challenges that
21 we'll face and maybe some peak into the plans we have to
22 respond. I would also say at Southern Company we've
23 actually had a chance to practice this. Unfortunately, and
24 then maybe fortunately in terms of being able to practice
25 this across Easter weekend and even the weekend following

1 this, Southern Company experienced two major windstorms,
2 nearly 600,000 of our customers across the southeast were
3 impacted.

4 We were able to put these protocols into practice
5 and I can tell you that they were largely successful. We
6 learned a few lessons as we went through that. We always do
7 a debrief on these storms and share it with our peers across
8 the industry of lessons learned. And I think we're all
9 learning from each other as we prepare for the even bigger
10 storms that could be coming ahead of us.

11 So those are some of the challenges I think that
12 are ahead of us. But I will tell you, I think we're
13 prepared. I think our COVID protocols are well-established,
14 well-communicated. All of the utilities around us,
15 particularly in the hurricane zone, are ready to respond.

16 Some might ask what challenge will there be to
17 restoration times as it relates to these COVID protocols. I
18 would tell you our reflection on spring storms that I
19 mentioned earlier is that it had very minimal impact on our
20 restoration times.

21 But I think every storm is different. Every
22 natural disaster is different and every utility across those
23 response areas are going to have to access those -- the
24 damage created from those storms and they themselves come up
25 with restoration times. But the experience thus far, on our

1 response to these COVID protocols has been fairly minimal to
2 restoration times, thankfully for our customers.

3 MS. RODER: Thank you so much Mr. Connally. The
4 next hand I saw up was Mr. Stan Chapman. Please go ahead
5 Mr. Chapman.

6 MR. CHAPMAN: Thank you Mr. Chairman for the
7 question, just to kind of share some of our thoughts with
8 respect to summer challenges in particular. When I looked
9 at what's going on right now, I think in the natural gas
10 space that we're seeing records, natural gas power
11 generation, as a matter of fact, at its peak a few weeks
12 back, over 40 percent of all natural gas that was being
13 delivered was going to power generation.

14 And we're seeing the same with respect to our
15 assets. We operate 13 different pipelines across the U.S.
16 and many of our pipelines are seeing the record power limits
17 as well. What that means to me is one thing that is
18 critical is that we continue to receive in a great timely
19 manner, accurate burn sheets from our power generator
20 customers.

21 This is essential to ensuring that our pipelines
22 are properly prepared with respect to line pack, et cetera.
23 As a matter of fact, you know, we -- the Midstream Pipeline,
24 through INGAA are meeting bi-monthly with the ISOs and the
25 RTOs to ensure that there is proper communications on this

1 and many other issues, especially at the control room level.

2 And I think that these discussions are essential
3 to ensuring that we're minimizing, if not eliminating, any
4 impacts of gas outages on the power grid. With respect to
5 hurricanes in particular, I would say that we continue to be
6 well prepared. Many, if not all of our operation's
7 personnel, continue to man their positions in the field.

8 Our contingency plans are in place and have been
9 tested and refined, given prior year activities and we
10 continue to drill for these scenarios. As a matter of fact,
11 just a few weeks back we had a little bit of a storm come
12 through the Gulf coast and everything was handled relatively
13 routinely.

14 One thing I do worry about however, is an issue
15 with bandwidth and internet outages, particularly with so
16 much of our work force working from home and many of the
17 homes don't have back-up generation and reliable back-up
18 generation sources that we may have at the office. So
19 that's one thing that I like to keep up, first and foremost
20 in my mind, making sure that we physically have the
21 connectivity to the extent that we have electric outages in
22 homes in particular.

23 Another thing I would bring up is to the extent
24 that we have outages with respect to our gas pipelines in
25 the field. At times it requires us to closely coordinate

1 that work with local LVCs and we have received some
2 justifiable pushback at times with respect to us asking to
3 pushback that work for fear that the LVCs don't want to have
4 to enter hundreds if not thousands of individual homes
5 during the COVID crisis to relight pilot lights and the
6 like.

7 But for the most part, we've been able to
8 reschedule or delay some of that work to make sure that
9 we're being respectful of all the safety and health
10 protocols associated with the pandemic.

11 MS. RODER: Mr. Chapman, thank you very much.
12 The next hand I see up is Mr. Tim Cawley, please go ahead
13 sir.

14 MR. CAWLEY: Sure, thanks. I'll really just echo
15 the prior remarks. Stan Connally covered it well. The
16 sharing across the industry has been really essential as we
17 fine-tune our storm restoration plans, much more
18 decentralized.

19 You can imagine feeding hundreds and thousands of
20 line workers in buffet style. That's not going to work. So
21 we have to rework those plans. And another example of sort
22 of rework would be making sure we have support -- adequate
23 support. Single occupancy rules is there lodging available?
24 We're checking in locally.

25 Business travel is down so far so good on that.

1 We check in frequently. And also support functions like
2 logistics and crew guides. We and likely many others pull
3 in retirees to help as crew guides for mutual aid crews to
4 steer them through the territory. And given their age, it's
5 not appropriate to have them in, so we're reworking those
6 rosters to make sure we're set, but we're ready, thanks.

7 MS. RODER: Mr. Cawley, thank you so much. I do
8 not see any other hands raised at this time. If you have
9 already responded to a question, please remember to unclick
10 the raise your hand function so we'll know if you have a
11 question. Please go ahead Mr. Chatterjee, Chairman
12 Chatterjee.

13 CHAIRMAN CHATTERJEE: Thank you all for your
14 insight. I want to follow-up with a question to Mr. Cawley.
15 As a utility in a state that was particularly hard hit by
16 COVID-19, what advice would you give to the utilities in
17 states that are now seeing a rise in COVID-19 cases? What
18 are some lessons learned that you would share?

19 MR. CAWLEY: Sure, thanks. So we were at the
20 onset of this and very dynamic at the front end. I think
21 many of our peer utilities are doing the things we've done
22 and that's as a result of a number of industry groups, the
23 FCC, EEI, sharing information about our experiences and
24 other experiences throughout the country.

25 We took the steps early on, focused on safety and

1 delivering reliable service. It's what we do. We have a
2 team of about 14,000 people that are incredibly dedicated to
3 that and that's not unique in the industry. They have been
4 tenacious and persistent, and safety focused and mission
5 oriented and they've done an incredible job.

6 We set up an incident command structure in late
7 March when the issues were really dynamic. And what that
8 does for us is allows us to take in feedback and changing
9 events very quickly, determine attack of action and then
10 communicate it in a cohesive way to our workforce.

11 Many of our peers are doing this. Our guidance
12 principle was if you can accomplish your job from home, stay
13 home. And within about a week we went from very few
14 employees who work from home regularly, to about 8,000
15 employees. That was a huge lift and accomplished by our IT
16 staff to make all of that happen and to make sure we do that
17 in a cybersecure way.

18 We curtailed contact with customers early, and I
19 think many companies are doing this as well. So meter
20 reads, smart meter installations, we slowed down on our gas
21 main replacement work because in order to affect a
22 replacement, you ultimately have to get into the house to
23 transfer the service.

24 So if we didn't need to do it, we really just put
25 it on the back burner. And in New York, as we moved through

1 late March into early May, at the peak there were 1,000
2 fatalities a day in New York City, so we really wanted to
3 keep people home for their safety, for their family's safety
4 and frankly for the good of society.

5 We stayed focused on ensuring that we responded
6 to emergencies, that we operated in a safe fashion, and that
7 we prepared for summer. And we are all ready for summer and
8 we're in the middle of it now. So I would say the central
9 incident command structure helped us a lot.

10 The sharing across the industry helped us a lot.
11 We provided a fair amount of input to others, but also
12 received a lot and we're able to implement that. And
13 frankly, as we continue to move out of it, you know, I would
14 like to say and hope the worst is over in our region, but we
15 are very, very careful and cautious to reiterate the
16 messages of social distancing, hygiene.

17 We are not in a tremendous rush to get back. Our
18 employees have been incredibly resilient as I've mentioned,
19 and we've been effective in their work from home. So we're
20 really going to be deliberate about a re-entry plan. We
21 don't want to get ahead of ourselves and we're delivering on
22 the mission now, safely and we're going to continue to do
23 that until the coast is clear.

24 MS. RODER: Go ahead with your next question Mr.
25 Chairman.

1 CHAIRMAN CHATTERJEE: Thank you for that Tim, you
2 have been dealing with the situation in a particular region.
3 My next question is for Stan Chapman. TC Energy has assets
4 in the U.S., Canada and Mexico, so you're in a unique
5 position to talk about your experience with the COVID-19
6 across multiple countries.

7 Can you just talk a little bit more about your
8 experiences as a company?

9 MR. CHAPMAN: Sure thing Mr. Chairman. We'd be
10 happy to do that and you're exactly right, we've kind of
11 worked from the bottom up if you will. Mexico City is
12 having a large number of growth cases with respect to
13 COVID-19, and as a matter of fact, as we go through our
14 return to office plans, we're actually going to implement
15 return to office work for about 25 percent of our
16 employees in Calgary on July 15, but we're not going to
17 implement a return to office plan in Mexico City given the
18 number of cases.

19 A matter of fact, even if you look at things just
20 within the U.S. themselves, we're not going to reopen our
21 Houston office on July 15th as we initially planned, given
22 the large number of COVID cases that we're see in Houston
23 and in Texas, in particular, but we will go ahead and reopen
24 our Charleston offices for about 25 percent of our
25 employees.

1 I think, you know, one other thing that's been
2 somewhat unique and perhaps a topic that we'll get into here
3 in a little bit, has been the increased number of
4 cybersecurity threats that we face. We were seeing
5 increased phishing, we're seeing increased cyber, cyber
6 threats coming through, all of which we've been able to
7 manage without any significant incidents.

8 But the reminder for all of us should be that
9 once we get distracted if you will, by something like a
10 pandemic, you can't take our eye off the cybersecurity
11 vehicle as well. With respect to operations I would say
12 things have been fairly the same across all of the three
13 locales -- Canada, U.S. and Mexico, in the context of we
14 moved early to sequester our desk controllers in particular.

15 And I think that that early move has paid
16 dividends. In the U.S. we have four different backup
17 centers that we have our desk controllers sequestered in and
18 we're just coming out of sequestration right now. We're
19 actually going to move back to more of a normal environment.

20 Same thing in Calgary, we'll slowly be migrating
21 out of the sequestration up there. But again, Mexico is a
22 very different situation given the number of cases that
23 they've been seeing of late.

24 MS. RODER: Go ahead with your next question Mr.
25 Chairman.

1 CHAIRMAN CHATTERJEE: Thank you for that.
2 Building on the issue of cybersecurity, my next question is
3 for Jim Robb. Stan mentioned phishing, what new
4 cybersecurity threats and vulnerabilities have been
5 identified during the COVID-19 emergency?

6 What resources are available to help with these
7 issues and actions that entities are taking in response?
8 And finally, NERC has monitored the impacts of COVID-19 over
9 the last several months. What have been your biggest
10 concerns, and do you have any recommendations or advice for
11 those in the energy industry? Thank you Jim.

12 MR. ROBB: Thank you Mr. Chairman. That's a
13 great question and there's a lot to unpack in there. First
14 of all the activities of our adversaries has been robust
15 over the last several months, not surprisingly.

16 In one of the main attack vectors that
17 adversaries employ are phishing emails. It's been mentioned
18 several times here. And this particular situation is
19 incredibly right to phishing attacks. You have a distracted
20 workforce, the volume of email traffic because of remote
21 work is extraordinarily high, and the ability to raise
22 anxiety which is one of the key things adversaries do to get
23 people to click on a malicious link is also very high.

24 So we've seen a tremendous increase in that sort
25 of activity. You know, there have been a number of you

1 know, publicly recorded issues as well. The denial of the
2 service attack on Health and Human Services in March,
3 alleged Russian attacks on German infrastructure, ransomware
4 attacks across the industry.

5 Very early on the collaboration software such as
6 Webex, Zoom, Microsoft Office 365, all saw a vulnerability
7 in attacks identified in -- or vulnerabilities identified in
8 attacks made. Lots of disinformation playing out across the
9 sector using social media, malware campaigns, attacks on
10 managed service providers, you've got the whole soup to nuts
11 of cyber activity.

12 I think the one thing that continues to impress
13 me and has really impressed me over the course of the last
14 several months is the level of partnership and collaboration
15 across the government, our government partners. DOE has
16 been terrific.
17 DHS, FBI and CIA have also been very good about sharing
18 information and early information with the ISAC and the ISAC
19 has been able to get that out to industry.

20 So I think the level of government intelligence
21 sharing on emerging attacks has been -- or emerging threats,
22 has been very, very good over this period of time. Industry
23 sharing as several have noted here, has also been quite
24 robust, particularly on the physical side, but also on cyber
25 threats to the industry.

1 And that's one of the key ways that we maintain
2 secure infrastructure is the voluntary information sharing
3 across industry participants through the ISAC portals that
4 allows people to see patterns where they might only see an
5 isolated event on their own.

6 I think one of the key things that this all
7 highlights though is that you know, basic cyber hygiene
8 remains extraordinarily important. So keeping systems
9 patched, there have been a number of key patching events
10 over the last couple months with Microsoft products and
11 other ubiquitous products across the sector.

12 It's critical that utilities keep their systems
13 patched using multi-factor authentication and isolation of
14 passwords across various systems remains very, very
15 important and you can't stress enough the importance of
16 keeping the workforce highly sensitized to the risk of
17 phishing emails, because that continues to be the
18 adversary's best vector of attack to get access to a system
19 and trick someone into giving up their credentials.

20 And then finally, you know, using the ISAC,
21 sharing information with it. As you see events, you know,
22 one of the things I keep telling people is you know, when
23 you see something, you see a single event, but when it gets
24 put through the ISAC, there's the opportunity now to see
25 patterns across industry. So continuing to share with ISAC

1 and the ISAC is going to continue this renaissance in trying
2 to take the information we get from industry, the
3 information we get from our government partners and turn
4 that into actionable insights for the industry.

5 I think they're making great progress on that.
6 The other thing I would note, and this kind of astounded us
7 when we looked at it is that the rate of membership growth
8 in the ISAC has been very, very high. I think we added 10
9 percent more members over the last four months and more than
10 we added in like the previous two years, or a statistic
11 similar to that.

12 So I think that's testament that the ISAC is
13 becoming a more and more valuable resource industry in this
14 area, and that industry is supporting it. And that's
15 probably one of the best places to go for putting industry
16 insights into cyber risk.

17 CHAIRMAN CHATTERJEE: Thank you Jim for that. I
18 want to build on something that you teed up about
19 communication, collaboration and information sharing. I
20 want to turn right now to Mr. Bryson. Mike, can you just
21 give us a sense of how the RTOs and ISOs have been
22 communicating during this time and sharing information as
23 you guys work through systems shortage due to COVID-19.

24 MR. BRYSON: Sure, thanks Mr. Chairman. So the
25 IRC groups, which is the ISO RTO Council have a number of

1 groups inside of that, so the CEO's met several times a
2 week. The operating -- my counterparts, met at least weekly
3 and sometimes more often. We also met across some of the
4 incident's response teams, the HR groups and this helped
5 significantly.

6 So I pointed out in my opening remarks for
7 instance, some of the lessons that we learned and from our
8 partners. New York ISO was a leader along with their
9 transmission owners in New York on sequestration operations.
10 And so understanding how they worked those issues was very
11 helpful to us.

12 And when you talk about things like having an
13 epidemiologist on consultant over at New England ISO idea,
14 the bench operator program and the simulator kind of
15 reconstruction that we're going through are things that we
16 picked up from FPP and frequent conversations. And then I
17 also touched on this topic of trying to forecast load during
18 summer operations.

19 You know we're trying to balance this. What does
20 the new summer demand look like when you have some return to
21 business, hot weather, a lot of residential use and we were
22 kind of lucky to be able to learn some of the lessons that
23 CAL ISO, SPP and ERCOT learned because they hit some very
24 hot operations in the May timeframe.

25 So those are just some examples of the

1 coordination. I think we've been very dependent on the IRC
2 to coordinate as well as a lot of the other reliability
3 coordinators as Jim Robb touched on. Those weekly calls
4 have been helpful as well.

5 CHAIRMAN CHATTERJEE: Thank you for that. For my
6 next question, I want to go to San Connally. Stan, you
7 literally wrote the book on re-entry. I just wanted to get
8 a sense from you from what the ESEC has done to get
9 utilities in a position to prepare to getting back to normal
10 operations. I'm curious in that how you feel that process
11 is working at FERC and then the final part of my three part
12 is you guys have allegiance that comes across a number of
13 states in the southeast.

14 I'm just curious if you guys are having any
15 trouble with states with moving men and women across the
16 territories. Thank you for bearing with me and thank you to
17 my colleagues for your patience as I ask these questions.

18 MR. CONNALLY: Thank you Mr. Chairman. First let
19 me get your and the Commissioner's decision to appoint
20 Caroline Wozniak as a single point of contact, if you will
21 for us. I think that has been incredibly effective having
22 someone we could go to with questions, someone that's
23 accountable for getting back to us has been incredibly
24 helpful for us and so thank you.

25 And I would tell you that's going very well. It

1 probably is a lesson learned from this for FERC and really
2 for all regulatory bodies in these complex times to give us
3 a point of contact to keep things simple. I think that has
4 been very helpful.

5 With regard to writing the book as you said, on
6 re-entry. Certainly, I need to thank our industry peers
7 around and those that served on the ESEC tiger team. We had
8 a tiger team that was identified to coordinate across the
9 industry on thinking through the critical elements of
10 re-entry.

11 And certainly every region of our country, every
12 company -- municipal or cooperative that's out there, has
13 specific local health dynamics that they have to think
14 through, but I think there's some leading practices involved
15 kind of rallied around.

16 At Southern Company, our responsible re-entry is
17 really built on three principles. One of them is clearly
18 being responsible, making sure that we keep those critical
19 workers at the forefront of our thinking. They've got to
20 remain healthy. We've got to get them the tools they need
21 to be healthy, the PPE, but also the work practices and the
22 support around them.

23 That's the responsible piece of this and to make
24 sure they can get home to their families. Secondly, a
25 measured approach if you will, I would tell you that I think

1 largely across our industry we're being fairly conservative
2 with bringing workers back to work locations.

3 Thankfully, and we talked about technology a
4 second ago. Technology has been an enabler of us and at
5 Southern Company we've got 16,000 of those 28,000 working
6 from home and working from home very successfully. And we
7 frankly feel no urgency to get them back to the work place
8 where the risks could be hire for transmission of
9 illnesses, and so a measured approach, a phased approach.
10 We have three phases in our playbook and at Southern
11 Company, most of our companies are sort of kind of in this
12 phase one where we continue to do essential maintenance
13 serving customers.

14 But we've communicated that it will likely be
15 sometime before all workers come back to their workplaces,
16 and maybe we'll establish like many in our industry,
17 teleworking practices that we can keep permanent for the
18 long-term.

19 And I think the last element of our playbook is
20 priorities and flexibility. I said earlier, every company,
21 every utility is in a jurisdiction that has its own health
22 dynamics. We built our playbook to allow local leaders, our
23 state CEO's to be responsible for the local decision-making
24 in consultation with the medical experts in their areas,
25 giving them the ability to bring their work as they see fit,

1 really built on that responsible and measured approach.

2 The ESEC has been amazing here. There are other
3 resource guides, you heard Jim Robb speak to one earlier
4 that's been very valuable. It was done in partnership with
5 NERC and the North American Transmission Forum. But the
6 resource guide that was developed here really was built on
7 multi-phases.

8 We've got IOU's, we've got our municipal and
9 public power, we've got a cooperative utility. We've all
10 come together. We've included the natural gas associations
11 in a few of those conversations, so we're all learning
12 together.

13 It's been an incredible tool and I'm fortunate my
14 Chairman CEO Tom Fanning Co-Chaired the ESEC with his
15 leadership along with others. I think our industry has
16 responded incredibly well. We've built tools through the
17 ESEC for others to use and I think as we write the history
18 on this pandemic, and hopefully we'll get to the point of
19 writing history in the coming months, this won't linger too
20 long.

21 I think one of the points of history will point
22 to this collaboration that is embodied in the ESEC, but in
23 other groups as well. It's one more proof point for our
24 electric utility and natural gas industries where we've come
25 together and responded to crisis in a very positive way I

1 think.

2 CHAIRMAN CHATTERJEE: Thank you Stan for that
3 response and for all your efforts. I just want to ask one
4 final question and then turn it over to my colleagues. For
5 Shawn Lyon, Mr. Lyon, can you take us through Marathon and
6 MPLX's planning for the impacts of COVID-19 over the next
7 six months, what contingencies are you guys taking into
8 account?

9 I noticed from the MPLX website, that you've been
10 able to share maps and other PPE that you had available with
11 local hospitals and healthcare facilities. Have you been
12 able to get the supplies that you need going forward to
13 ensure the safety of your personnel?

14 MR. LYON: Yeah, thank you Chairman Chatterjee
15 for that question. You know I think let me break it down a
16 little bit and I think planning is still very fluid, but the
17 structure that we implemented right away and several of the
18 panelists said the same thing -- intimate command structure
19 really builds, walks you how to set up a structure that
20 enables success to your objectives.

21 And the objectives are to keep your employees
22 safe, your contractors safe, and the public safe. And so
23 that remains as we move forward. So we'll continue with
24 those meetings ongoing, and part of that is making sure you
25 have the supply lines to get the resources you need, the

1 PPE.

2 And some of those things are easier to get now,
3 but some are still very difficult, you know, the public is
4 wearing more masks. You know initially masks were very
5 sparse to find. Personally we had some nice planning and
6 preparation by our corporate and our safety groups, and then
7 when we realized here's what we need, we did share that with
8 some of the nation's frontline workers, healthcare workers,
9 hospitals, first responders because that was the right thing
10 to do.

11 But you know if we continue a lot of our planning
12 is also centered around how quickly the economy is
13 responding to the demand for our products. And I've never,
14 I mean I've been in this industry 30 years now and I've
15 never seen the fluid nature of that.

16 You know, you go from hardly anyone driving to
17 now there's a little bit of driving and sometimes you'll see
18 a spike here or there, and so I think everyone is trying to
19 figure out what's that picture and how do you plan for that
20 because we've never been down this road before. So that's a
21 big part of what we're trying to decipher is you know, how
22 quickly things are coming back, you know, as previously
23 mentioned several states, you know, there's been spikes in
24 cases and people are you know, tamping down a little bit, so
25 that's going to affect again, you know, the revenue side and

1 just the business -- the demand for our product.

2 So we're still trying to weave our way through
3 there, but I would say the incident command system really
4 allows us to really be on with what the latest information
5 is and have a structure that enables a wide decision.

6 And then I'll just mention lastly, I think part
7 of that planning is a strong industry that collaborates, and
8 it's been mentioned several times. You know it's not only
9 the formal association and you know, like FERC and PHMSA and
10 everything that we work with, those are the individual
11 relationships. You know, being able to pick up the cell
12 phone and say, "Hey, how are you guys handling this?"

13 And that insight, you know, gives a perspective
14 that can help us all really meet the needs of the nation. I
15 think that's really what's on our radar for the next six
16 months.

17 MS. RODER: Thank you Mr. Lyon. And just to
18 fill-in, I know that Stan Connally has his hand raised. I
19 believe he would like to supplement his previous answer.

20 CHAIRMAN CHATTERJEE: Perfect.

21 MR. CONNALLY: Mr. Chairman I apologize. I
22 didn't answer your third question and I think it's an
23 important one as it relates to the ability to move our
24 workers around our service territories and even around the
25 nation when times dictate that.

1 Still we need to be thankful for the work of our
2 fellow government partners, Chris Krebbs at DHS, yourself
3 partnering with NARUC President Brandon Presley and others,
4 really coming out very clearly stating that our utility
5 workers are a part of a critical infrastructure network and
6 they're essential to keeping our economy powered and your
7 help, others help has been great there.

8 I also just add that within our states our
9 governors have been great partners, the state health
10 organizations. We really have not experienced many really,
11 if any, struggles with moving men and women around our
12 service territories. I think a challenge going forward, and
13 I'm going back to a previous conversation around emergency
14 restoration, maybe hurricane response.

15 We will be calling on workers from other states
16 to come and help us. I know there are some restrictions
17 implemented by some states on men and women traveling from
18 other areas. I think that's an area we're going to have to
19 continue to focus on, again working very closely with our
20 governors, working very closely with our states to ensure
21 that when we need those men and women to come from other
22 states into our territories, then we can do so freely and
23 without delay.

24 But within our territories we've been very
25 fortunate that our state partners and even our federal

1 partners, including this Commission have been great
2 supporters of that and so far it's worked very well. Thank
3 you for allowing me.

4 CHAIRMAN CHATTERJEE: Thank you Stan. And I just
5 want to thank all of the panelists for your participation.
6 I may have a few more questions if we have time at the end,
7 but I want to give my colleagues an opportunity to weigh in
8 starting with Commissioner Glick. Commissioner Glick, thank
9 you for your patience.

10 COMMISSIONER GLICK: Thank you Chairman
11 Chatterjee, I appreciate it. I want to start with a
12 question for Mr. Robb. You know until recently I didn't
13 know that NERC had put out a pandemic response plan back in
14 2009 which sounds really interesting.

15 I wondered if you could elaborate on the plan,
16 talk about how it's worked, and how they've implemented it
17 during this COVID-19 crisis. And then third, maybe you can
18 talk about the importance of planning in general since that
19 seems to be a very important topic for what we're
20 considering today.

21 MR. ROBB: Well Commissioner Glick, that's a
22 great question and I'll tell you I guess right now I wish I
23 had gone back and reviewed that plan before this Conference.
24 I would say though that that plan was done completely
25 uninformed by the extraordinary circumstances that this

1 COVID situation has presented in terms of its breadth and
2 depth of the crisis it has created in certain geographies.

3 But my sense is that that plan served us in the
4 industry well in terms of the basics that needed to be done.
5 But I think it would be very fair and self-critical to say
6 that although we've proved to be foundational, that
7 assessment as I think Mike Bryson mentioned earlier, in many
8 ways we've been at some level building the plane as we're
9 flying it because this particular virus has had so many
10 uncertainties around it surrounding it and has just proven
11 to be so extraordinary in its depth.

12 I think that's one of the reasons why the ESEC
13 has been so fundamental to the success of the industry's
14 response. As Stan Connally mentioned, the creation of the
15 resource guide that was put in place. I think we're now on
16 the 10th or 11th version of that.

17 It's been a living, breathing document and as
18 we've been experiencing the pandemic, the great thing is
19 we've been documenting it so that when we get to the other
20 side of this crisis, we'll have a very good living document
21 that will prepare us for the next one, which hopefully none
22 of us will ever experience.

23 The other thing -- I think the other point I
24 would say to you, the point around planning. I think
25 planning is really critical because one of the things that

1 has served the industry well has been with its very early
2 activation of the ESEC playbook, the integration and
3 interactions with our government partners to really
4 understand the facts as we understand them at the time.

5 And to really figure out quickly, you know,
6 getting workers sequestered where they needed to be,
7 prioritizing workers for personal protective equipment for
8 testing, ultimately for vaccines. All of that activity
9 needs to be talked to ahead of time.

10 I think one of the things that I've noted in
11 talking with a number of CEOs around the industry is many of
12 us had business continuity plans. We've exercised them, but
13 this is the first time that we've really put them into
14 practice in such an extraordinary way.

15 And I think there's a little bit of wow, that
16 worked, as well as they wanted it to. But I think that goes
17 to show the value of planning and the value of drilling.
18 And even though our lens on this particular virus was pretty
19 murky, all that preparation work -- even going back to the
20 2009 assessment, I think served us all very, very well.

21 MS. RODER: Chairman or Commissioner Glick,
22 excuse me. I noticed that Mike Bryson also has his hand up.

23 MR. BRYSON: Yeah, Commissioner Glick, just
24 briefly, just to kind of add on to what Jim Robb said. One
25 of the things -- one of the chapters I think that's going to

1 be important in this updated pandemic plan is the
2 sequestration operations. And we've got a number of
3 utilities around the country who have done that -- Con
4 Edison, certainly New York ISO, I think ITC, PJM did it and
5 it was not -- one of the things I think from an RTO
6 perspective that we had a disadvantage to I think, some of
7 the transmission owners who do mutually, they do logistics
8 support from big operations, is that we didn't have that.

9 And so that's an important part of the chapter
10 because I think more utilities may rethink that sequestering
11 and more may need to do it. One of the big things, and this
12 may be an area FERC and our government partners can help
13 with is the ability to test frequently was such an important
14 part of the sequestration operations and we're going to have
15 to figure that out.

16 I think we're still not even there today. If we
17 had a second wave, testing becomes a huge barrier. We were
18 lucky to have volunteers who were willing to go for 10-11
19 weeks, because so we didn't have to do as much testing, but
20 that's going to be a big part and a good place that
21 hopefully FERC and some of the federal partners can help
22 with.

23 MS. RODER: Commissioner Glick, there are no
24 other hands raised, so I think we're ready for your next
25 question, thank you.

1 COMMISSIONER GLICK: Thank you. The next
2 question relates to something Mr. Cawley said in his
3 testimony. So we're talking about the fact that obviously a
4 lot of us are working from home now and that's going to
5 continue for a while, but that may be continuing beyond the
6 COVID-19 crisis and that might have implications for
7 utilities in a number of ways.

8 Particularly, for energy assistance, I think Mr.
9 Cawley said that you know, this might provide an opportunity
10 for utilities and other energy companies to go back and
11 assess or reassess the residential energy efficiency. So I
12 was wondering, this question is pretty much for everybody.
13 What you think the opportunities might be with regard to
14 residential energy efficiency coming out of this and what we
15 should be looking for.

16 MS. RODER: Thank you Commissioner Glick. Mr.
17 Cawley, please go ahead.

18 MR. CAWLEY: Sure, thanks Commissioner. Yes, so
19 we're seeing in our service territory, in particular the
20 residential commercial mix, has really been impacted. If
21 you think of New York City and the island of Manhattan in
22 particular, demand is down about 20 percent in Manhattan --
23 sales and demand. And in our residential areas, while
24 there's some dip, it's much less and that's because more
25 people are at home doing work, et cetera.

1 More activity at home yields more use and also
2 yields larger bills. So we think that we have a number of
3 residential programs that target efficiency at the
4 residential level, but we think sort of redoubling in those
5 efforts might be a really good target for us, allowing us to
6 help clean the environment and allow customers to be
7 responsible stewards and to lower their bills.

8 So really the idea would be to take a look at the
9 programs that we've worked and innovated over the years, and
10 infiltrate to a greater extent, a low and moderate income
11 also heavily impacted, and that's a place where we think we
12 can continue to play a larger role in helping clean up the
13 environment and minimize bill impact for customers.

14 MS. RODER: Thank you very Mr. Cawley. The next
15 hand that I saw raised was Mike Bryson. Please go ahead Mr.
16 Bryson.

17 MR. BRYSON: I just forgot to put my hand down,
18 so I'm going to take it off now.

19 MS. RODER: Very well thank you. The next hand I
20 saw raised was Mr. Robb. Please go ahead Mr. Robb.

21 MR. ROBB: Sure. I was just going to make a
22 tangential point related to energy efficiency. As we looked
23 at our operations and activities over the past three to four
24 months, one of the things we've been focused on at NERC is
25 our sustained ability profile overall.

1 And one of the interesting things to us is that
2 one of our biggest contributors to carbon emissions is
3 related to the amount of travel that we do -- commuting and
4 air travel. And I think one of the other big upsides in
5 this is we think through how to use more remote work as
6 opposed to having people commute to the office, more
7 Webex-type meetings as opposed to having to fly to meetings
8 and so forth.

9 The impact on our overall sustainability
10 footprint I think will be significant as we go forward.
11 Again, that's from a perspective of an intellectual capital
12 organization without operating assets. But it's proven to
13 be, I think, has the potential to be a very potent
14 opportunity for us to do our part in the carbon emission
15 issue.

16 MS. RODER: Thank you very much Mr. Robb. The
17 next hand that I saw up was Mike Haynes. Please go ahead
18 Mr. Haynes.

19 MR. HAYNES: Thanks Aileen, thanks to you
20 Commissioner Glick for bringing this up. I think from
21 Seattle's perspective, I didn't want to lose sight of
22 everything the other panelists have mentioned, but also
23 what's very important to us, especially in a municipal
24 world, is not to lose sight of the underserved communities.

25 And we think that there's the efficiency measures

1 in particular, there's a huge opportunity to fill a gap
2 there, and these recent events over the last three-four
3 months have highlighted our need to really focus on, I
4 think, the underserved communities. So we're going to
5 create that opportunity and work really hard to make sure
6 that energy efficiency proliferates, but also that the
7 opportunities are made across the board to everybody who
8 wants access will get access to those measures. So I didn't
9 want to lose sight of that, thanks for the question.

10 MS. RODER: Thank you very much Mr. Haynes. I
11 see that Stan Chapman has his hand raised. Please go ahead
12 Mr. Chapman.

13 MR. CHAPMAN: Yes Commissioner, perhaps a second
14 derivative of your question around residential efficiency is
15 whether or not this environment really has so many
16 individuals working from home with some to be permanent or
17 temporary and that's something I know that our company is
18 going to be taking a very hard look at and I think our
19 initial thoughts are to a great extent, there may be some
20 jobs that could be done at home on a permanent basis, but we
21 see a large migration back to the work force, back to the
22 office over time.

23 But I do actually have a comment around things
24 like air travel for example. I think one of the things that
25 we've learned through this process is that being able to

1 hold a meeting and communicate via Zoom or Webex or the
2 like, is something that actually works pretty darn well in a
3 lot of cases, and I would not be surprised to see a lot less
4 air travel and the like due to that.

5 MS. RODER: Thank you very much. Mr. Chapman.
6 Commissioner Glick, there are no other hands raised, so
7 please ask your next question, thank you.

8 COMMISSIONER GLICK: Okay thank you. My next
9 question maybe for Mr. Robb, but pretty much everybody as
10 well I would think. I want to talk a little bit about the
11 supply chain. On the one hand if with the onset of the
12 COVID-19 pandemic, whether you all have seen significant
13 disruptions in the supply chain and if not, do you foresee
14 that it may occur as the situation progresses and what you
15 all are doing about it.

16 MR. ROBB: So great question Commissioner. In
17 terms of kind of core electric components and things for the
18 system, we've not seen any issues identified or reported to
19 us. And I would note that a number of restorations have
20 occurred, storm related restorations over the last three to
21 four months, and supply and critical equipment is spared, it
22 has not been an issue.

23 Now I think the longer this goes, I think the
24 risk of that continues to mount, but at this point we're not
25 seeing any cause for contemporary alarm. I would say the

1 one thing that has been an issue, and probably will continue
2 to be an issue, have been things like personal protective
3 equipment, and getting the right -- getting maps into the
4 right places.

5 I know in the last ESEC call, there was a series
6 of issues raised about mask availability in California,
7 particularly as you approach wildfire season. And as you
8 move into hurricane season and restoration, will there be
9 lots of workers working in close proximity? The
10 availability of PPE becomes really very, very important at a
11 very large scale.

12 And I think that's what we're seeing right now
13 supply chain challenges. But in terms of the core electric
14 components, nothing has manifested yet that would lead us to
15 sound an alarm. We continue to encourage the industry, do
16 the ISAC and through our work with the NERC alert and so
17 forth to be very aware of supply chain vulnerabilities and
18 the potential for disruption.

19 But again at this point I think we're feeling
20 that that industry has taken that advice in hand and to date
21 we've not had any issues.

22 MS. RODER: Thank you very much Mr. Robb. The
23 next hand that I saw raised was Mr. Bryson. Please go ahead
24 Mr. Bryson.

25 MR. BRYSON: Thank you Commissioner. So one of

1 the things that we saw particularly early on in the later
2 half of March, early part of April is a lot of concerns
3 about supply chain, particularly for a generator. A lot of
4 this had to do with the concern that wound up not being as
5 severe, about travel restrictions, curfews, and things like
6 that.

7 We worked very closely with our state regulators
8 to try to stay ahead of that, but I think it turned out to
9 be not as big of an issue. I think that the issue I talked
10 about before, PPE and testing in the future, is something
11 we've got to stay focused on. And then I know it may be
12 addressed a little bit later, but this -- your executive
13 order that's out there and just coming up with a very
14 thoughtful approach to how we kind of mitigate the
15 implementation of supply chain when it comes to some big
16 capital equipment and some of the embedded concerns that we
17 have with that executive order, thanks.

18 MS. RODER: Thank you Mr. Bryson. The next hand
19 that I saw raised was Stan Chapman. Please go ahead Mr.
20 Chapman.

21 MR. CHAPMAN: I would say from the pipeline
22 perspective, I'd echo the prior comments in that there have
23 been some minor delays, but perhaps surprisingly, not being
24 critical at this point early on in the process, hand
25 sanitizer and PPE. At periods of time when they were a

1 little bit difficult to get our hands on, but that seems to
2 have worked itself out over time.

3 I would note that one thing that we learned from
4 our field employees is when you're wearing a mask in the
5 field it tends to fog up your goggles, so maybe there's an
6 opportunity for some innovation and some new products to be
7 developed out of this.

8 I would also note that we're part of a global
9 supply chain and there are certain items such as valves, to
10 an extent, that tend to be supplied disproportionately from
11 one country or one region of the world. And in those
12 instances, we definitely need to take a step back and ensure
13 that we have a broad supply of these types of critical parts
14 and that we're not only dependent on getting a region or
15 country to supply them to us.

16 MS. RODER: Thank you very much Mr. Chapman. I
17 will now call on Stan Connally, please go ahead sir.

18 MR. CONNALLY: Thank you. Commissioner, I want
19 to talk to some of the great points that have been made by
20 my fellow panelists. I would also just add one point to the
21 ESEC tiger team approach. One of those teams we've
22 established across the industry is a supply chain team to
23 keep their finger on the pulse, if you will, of what the
24 supply chain issues are.

25 Jim Robb talked about some hot spots, if you

1 will, needs for PPE. The intent is for those tiger teams to
2 raise those issues to the ESEC and to our fellow government
3 partners to help resolve those matters quickly.

4 Doing pulse surveys of utilities who are in turn
5 surveying their own vendors. Currently we're not hearing of
6 any major supply chain concerns, so that's good, but I think
7 as one of my panelists noted, over time the pressure on that
8 could rise. I'll end with I think at some point, this may
9 be another example of where we need to lean in on some
10 industry partnerships that were established prior to this
11 pandemic that we're a part of making some large transformer
12 sharing arrangements across the industry.

13 We're also a part of some sharing arrangements on
14 some nuclear plant parts. And I think those arrangements
15 and I'm not aware that we called on them thus far during
16 this pandemic, but those are examples, I think, of you know,
17 federally sponsored, FERC sponsored partnerships that we all
18 need to consider enhancing going forward to be sure in times
19 like this that the major equipment that we need to keep
20 reliability where it needs to be is there when we need it.

21 So I think that's an area that we can continue to
22 focus on going forward.

23 MS. RODER: Thank you Mr. Connally. Commissioner
24 Glick, there are no other hands raised, so we're ready for
25 your next question, thank you.

1 COMMISSIONER GLICK: Okay. I have one final
2 question for Mr. Bryson and it really relates to long-term
3 forecasting and planning. I know Robb's struggling trying
4 to figure out what the short-term and medium-term impacts
5 have been and will be from the pandemic. But also, it's a
6 little unclear at this point what the long-term impact is
7 going to be.

8 And I wonder, how PJM's navigating this in terms
9 of long-term forecasting and what the load patterns and
10 levels are going to be over the next five year horizon.

11 MR. BRYSON: Sure thanks. And one of the things
12 that we've been tracking very closely is kind of the back
13 half as we experience these load drops. I think the good
14 news is its' kind of weened down and close to normal. It's
15 decreasing less, I should say, than it has been.

16 But we did use a lot of that data to try to
17 forecast into the future, so two or three years out. In
18 fact, recently filed with FERC and the order was approved to
19 adjust the load forecast for our capacity procurement we
20 have.

21 So we need to continue to take a look at this.
22 There's a lot of moving parts already at the load forecast
23 with some of the behind the meter generations, solar, energy
24 efficiency, the economic states and things and just a
25 layering on top of that some of the COVID things we saw.

1 And then a lot of the things that the panelists
2 talk about today. So we'll continue to need to pay
3 attention to that in the future and make those adjustments
4 in our forecast, because it affects our capacity
5 procurement, it takes a lot of different things out into the
6 future.

7 MS. RODER: Thank you Commissioner Glick. I
8 don't see any raised hands.

9 COMMISSIONER GLICK: Thanks a lot, I don't have
10 any further questions.

11 MS. RODER: And I see that we are now going to
12 start our 15 minute break. We will come back on at about
13 11:10 and Commissioners and panelists, please stay signed
14 into the system over the break, but mute your phone if you
15 have not done so yet. Please also turn off the camera
16 during break.

17 Remember that the public will continue to see the
18 video and hear any conversations. We will be back at
19 11:10 thank you.

20 (Break.)

21 MS. RODER: Thank you everyone. Again, it's
22 Aileen Roder with FERC staff. We're happy to review Panel 1
23 and I'd like to start off by asking if Commissioner McNamee
24 is here and ready to begin his questions, thank you.

25 COMMISSIONER MCNAMEE: Yes, I am here and thank

1 you. And thank you everybody for being part of the panel.
2 It's very interesting. What I'm interested in hearing about
3 now is the challenges of having access to workers. Now we're
4 in the situation where -- you know, we're either locked down
5 and we're having limited access, social distancing all
6 those. I'd like to hear from each of the industry's, you
7 know, are there challenges to recruiting and training
8 workers, particularly skilled workers like pipefitters,
9 welders, lineman, and what are the plans to deal with this
10 issue especially if unfortunately, the lockdown and kind of
11 the social distancing continues for a while.

12 MS. RODER: Thank you Commissioner. I see that
13 Mike Bryson has his hand up. Please go ahead Mr. Bryson.

14 MR. BRYSON: Good, thank you Commissioner. So
15 one of the things that we had happen is right about a week
16 before pandemic is we went ahead and had made two offers to
17 operators and had to have that put on hold.

18 And as we kind of hit the May timeframe realized
19 that we're not going to be able to put off training, put off
20 onboarding new operators and new employees in general. So
21 we started to look at some different approaches because, you
22 know, the operator and it's probably true for some of the
23 crews out there -- the onboarding and training process is
24 pretty significant.

25 So one of the things we did in May is we actually

1 had our ninth sequestered operator was a new operator who
2 volunteered to come in and be trained. It turned out good
3 because we had a very focused -- eight operators who were
4 very focused on his training during that. So that's kind of
5 the way we tackled it to kind of sustain that training and
6 onboarding.

7 Since then we're making another offer. Next week
8 another operator again looking at ways that we're going to
9 be able to sustain that. We've got a couple pending
10 retirements that were deferred for a little bit, I think
11 which helped us a lot, but and I mentioned in my opening
12 remarks, we're getting our simulator back up and going
13 because we used our original simulator for a third control
14 room.

15 Once we get that simulator up, we need to figure
16 out how we're going to be able to conduct beneficial
17 training going forward for existing operators and new
18 operators as well.

19 MS. RODER: Thank you very much Mr. Bryson. The
20 next hand that I saw raised was Mr. Lyon. Please go ahead
21 Mr. Lyons.

22 MR. LYON: Thank you Aileen. I would just -- I
23 would say it this way. There's a couple things and as Mr.
24 Bryson mentioned, we had some training classes ongoing for
25 our controllers in our control centers, and those usually

1 last 8 to 9 months, so we had to become creative. How do we
2 keep that training going because there -- as we talked
3 earlier, that was a core mission critical activity that we
4 had to keep going for pipelines.

5 And so we learned how to use some of our backup
6 operations to sequester the training class and still give
7 them valuable insights and keep them on track so they're
8 ready to go at the end of their training in 8 to 9 months.
9 So that continued on.

10 The other thing that is really kind of neat
11 through this COVID-19 pandemic has been the evolution and
12 enabling of technology really in the training world. What
13 we do -- some of our, what's called our operator
14 qualification, we used to do those in person, so we've got
15 workers all over the country and we have had to have people
16 go out there and witness what they're doing as part of a
17 PHMSA regulation that requires us to do that.

18 You know, in working with PHMSA and others, we
19 are now able to do that virtually, and be able to do it over
20 a video screen. And I see that continuing in some form or
21 fashion, you know, hopefully past this pandemic period, even
22 now.

23 So I think training is going to evolve, probably
24 not just for the short-term, long-term, where we'll do more
25 through video, you know. We're more used to talking to

1 strangers as we're doing today. And I think it's important
2 that we continue doing that as our industry evolves, because
3 having training and skilled workers on a front line is
4 critical to our 24/7 365 safety and reliability mission.

5 MS. RODER: Thank you Mr. Lyon. The next hand
6 that I saw raised was Mr. Chapman. Please go ahead Mr.
7 Chapman.

8 MR. CHAPMAN: Maybe just to echo some of those
9 comments. I would first note that as I looked across TC
10 Energy's 13 pipeline network in the United States, demand
11 across our pipeline system since March 1, which we'll call
12 the beginning of the COVID period, demand is actually flat
13 to up, all things equal, which basically tells me that
14 there's still this need for what we do.

15 And now going back to the beginning of this
16 crisis, we asked our field employees for volunteers as to
17 who's willing to go out and get this work done. And not to
18 my surprise, virtually 100 percent of our employees raised
19 their hand. So in terms of having a robust and experienced
20 workforce out to the field today, I feel very, very
21 comfortable without that.

22 We have been hiring during this pandemic period.
23 And like you heard from others, we have been onboarding
24 virtually and undertaking training activities virtually to
25 the extent that is practical. And I think you know, one of

1 the keys things that just jumped out at me is we're not just
2 offering individuals jobs, we're offering them career paths.

3 And career paths that pay a real living wage, for
4 example, when you look at a welder for example. So being
5 able to attract qualified talent and provide them with the
6 tools and the resources and training that's needed to make
7 sure that they are working productively but yet safely and
8 following all the health protocols so far has not been an
9 issue from our perspective.

10 MS. RODER: Thank you very much Mr. Chapman. The
11 next hand that I saw raised was Mr. Connally. Mr. Connally,
12 please go ahead.

13 MR. CONNALLY: Great, thank you. Commissioner
14 McNamee thank you for that question. Certainly I would
15 agree with my colleagues here that with the availability of
16 some of the skilled workers that we use in Southern Company,
17 the electrical workers, the gas technicians, we continue to
18 do some hiring for those particular jobs during the pandemic
19 and we're not aware of any obstacles or barriers to finding
20 the talent we need.

21 I'll also shift and talk some about our
22 contractor partners and our construction partners. You know
23 we're building one of the largest -- we're going to have one
24 of the largest construction programs going on in the country
25 at our Augusta plant, some 7,000 workers, many of them

1 represented across all the different states.

2 We're hiring even today. Focused on the areas
3 like electrical workers, pipefitters in partnership with the
4 unions that have supported us, we're finding the workers we
5 need. So while there may be some slowdown across the nation
6 on some projects like that, maybe in some sense that has
7 made the availability of those workers more readily
8 available for us for our work at Southern Company. So so
9 far, so good.

10 MS. RODER: Thank you Mr. Connally. The next
11 hand that I saw raised was Mr. Tim Cawley. Please go ahead
12 sir.

13 MR. CAWLEY: Sure. Thanks Commissioner. My
14 colleagues have covered it well. I would only add that in
15 terms of access to the employees in the immediacy where we
16 are, we're really focused on the health and safety of our
17 incumbent employees, so that's social distancing, hygiene
18 and some rigorous self-checks to ensure that if one of our
19 employees is feeling ill, they're encouraged to stay home
20 for the good of the order.

21 Our hiring has slowed a bit, but we're keeping
22 copious track of what we need to bring in and we'll resume
23 that as soon as the state continues to move through its
24 phase of re-entry. And that acts as a really good economic
25 driver for the region. So we look forward to keeping our

1 incumbents safe and bringing on new folks as soon as the
2 coast is clear, thanks.

3 MS. RODER: Thank you Mr. Cawley. And the last
4 hand that I see raised is Mr. Haynes. Please go ahead Mr.
5 Haynes.

6 MR. HAYNES: Yeah. Thanks a lot and I want to
7 build on the great comments that have already been mentioned
8 and just highlight. It's an excellent question and our
9 Seattle recruitment's been pretty much continuous through
10 this. I think the onboarding challenges are significant and
11 bringing especially electrical workers in from a remote
12 perspective, but we're finding a way to navigate that space.

13 We have open recruitments in pretty much all of
14 our skilled trades. I think not surprisingly on the west
15 coast, at least I think we find ourselves competing with all
16 the other utilities in the industry for the same skilled
17 trades, and as construction continues to ramp up in the
18 Seattle area in particular, that limitation on skilled
19 trades is going to get a little bit tighter.

20 So we'll pay real close attention to that.
21 Leaning into our apprenticeship as much as we can, but again
22 that's another difficult one because the requirement for
23 schooling and things like that. So lots of challenges,
24 we're trying to be strategic and trying to make sure we got
25 the right people in the right place. That is definitely

1 something to pay attention to.

2 MS. RODER: Thank you Mr. Haynes. Commissioner
3 McNamee, that's the last raised hand. We're ready for your
4 next question, thank you.

5 COMMISSIONER MCNAMEE: Great. Well, first of all
6 thank you for those answers. I'm actually heartened to hear
7 that access to trained workers and the ability to continue
8 training them continues, because that's going to be very
9 important for the industry to keep operating, but obviously
10 to the economy, so that's very heartening.

11 I want to touch on something that Mr. Chapman
12 brought up before the break and that is about, you know,
13 wanting to think through whether this is going to be
14 temporary or permanent. And you know, the way I've been
15 looking at this is you know, is this going to be
16 "short-term" and it seems to be getting long-term or
17 long-term every day, but really a short-term longer-term,
18 meaning you know, it's not over by the end of the year and
19 it goes to the next year.

20 And you know, the different pathways that each of
21 the industries are thinking about you know, is the working
22 from home scenarios that we're seeing right now, the way to
23 organize, is it something that is sustainable beyond the
24 short-term, is it something that can go on for the long-term
25 if we need to, and because of those insights, how is that

1 going to change you know, once this is over.

2 Are the things that are going to be different in
3 how you operate and is the follow-up to that. If so, are
4 there things that you would like us as a Commission to start
5 considering as you're looking to the future about how things
6 are going to operate, whether we continue this in the
7 short-term, long-term, or when we get back to "normal".

8 MR. DEBONIS: I believe it's going to be a part
9 of what we do going forward. We're going to have more
10 options to work from home and I think what that's going to
11 do is also put us in a better position going forward. If
12 you think about it, if we are able to operate as we are
13 today and we can do that with folks working from home, down
14 the road if we decide to bring some of our folks back and
15 they might be working two or three days from home, what a
16 strong business continuity approach that is.

17 If we have folks that are working home some of
18 the time, if things change, if there's adjustments that need
19 to be made for any type of business continuity item, it's
20 easy to transition back to more folks working from home. So
21 I think one of the things that prompts me to say at this
22 point is that you know, I look at it from Southwest Gas
23 position. The fact that we've been able to go through these
24 challenges with COVID, adjust policies and procedures, be
25 able to work -- have folks work from home, try these

1 different approaches.

2 I believe we're a much stronger company today
3 than we were even three or four months ago. And I think
4 that's the case for industry as well. So I just think this
5 work from home will be more permanent and will be decided by
6 individual areas, individual companies, but I think it's
7 going to be a great tool in our tool kit going forward.

8 MS. RODER: Thank you very much. The next hand I
9 saw raised was Mr. Chapman, please go ahead.

10 MR. CHAPMAN: Commissioner, just to directly
11 respond to your question. I would say that the current work
12 environment is definitely sustainable, but I don't believe
13 that it is necessarily the new normal. And what I mean by
14 that is there may be certain elements of what we do,
15 analysis scheduling for example, that may be more conducive
16 to allowing to a work from home environment, at least a
17 certain number of days per week.

18 But I don't necessarily see this being a shift
19 industry-wide that says we're going to focus the majority of
20 all of our employees to a work from home environment longer
21 term. I've been presently pleased overall with respect to
22 the fact that we've really maintained a lot of our
23 productivity over the past 15 or 16 months, but also can't
24 help to believe that perhaps we could have been even more
25 productive if we had more social interacted, more face to

1 face meetings back in the office and the like.

2 So I think again, my perspective is it's more of
3 a temporary shift, although to your point, short-term is
4 becoming longer and longer. We'll be able to get through
5 this and then we'll return back to more of a historical
6 normal. But again, I do want to make sure that we think
7 about this in a very thoughtful approach and look at are
8 there specific jobs or tasks that can be done from home at
9 least on a partly basis, and I think I would speak for a
10 majority of our employees, I don't know that they want to
11 work from home full-time, but maybe more flexibility around
12 one or two days a week being able to work remotely is
13 something that they would prefer.

14 And to the extent that we can do something like
15 that without sacrificing productivity is something that we
16 would consider I think.

17 MS. RODER: Thank you very much Mr. Chapman. The
18 next hand that I saw raised was Mr. Connally. Please go
19 ahead Mr. Connally.

20 MR. CONNALLY: Thank you, thank you Commissioner.
21 To your question what could FERC do, as we think about maybe
22 this new normal, it's interesting. Just this very morning I
23 saw an example of what FERC can do to support some form of
24 the new normal, whether it's teleworking.

25 We just used this gift of technology that we've

1 been given through this pandemic. This has been tragic in
2 so many ways, that we have learned new ways, new business
3 processes. And I got a note this morning one of our
4 subsidiaries of Southern Company is scheduled for their
5 self-audit this year and the team from FERC has indicated
6 they're going to do virtual onsite sessions with this
7 subsidiary.

8 Those may not be entirely consistent with what a
9 new normal could look like, some face to face interaction I
10 think is incredibly valuable. I think they were missing
11 some things when we can't be face to face. But really
12 taking advantage of the technology we have got in front of
13 us here and the example I gave you.

14 I think that's something we can all just work
15 better together on. I mentioned earlier in a question about
16 just making sure we take advantage of this technology that
17 we have learned more about it to be more efficient, more
18 effective, for all of us to be more efficient as we move
19 forward here.

20 And I think that's one example of what FERC's
21 already doing. I'm sure there's others we can continue to
22 look at.

23 MS. RODER: Thank you Mr. Connally. I believe
24 the next hand I saw waved was Mr. Haynes, please go ahead.

25 MR. HAYNES: Yeah, thank you. I'll just pick up

1 on that a little bit. Stan mentioned FERC and I want to
2 just pivot on that a little bit and highlight a couple
3 things. You know we've got partial inspections coming up in
4 the dam safety world and so I think you have to get really
5 creative on how that happens.

6 It's a heavily field activity traditionally and
7 I think we're partnering with Portland Regional Office to
8 figure out the best way to accomplish that. And also just
9 to fair off of the technology business, you know, there's
10 two things that we've had very successful expansions in, the
11 first of which was back in April we did a completely remote
12 go live for our energy and balance market participation.
13 And that was something that we hadn't planned on leading
14 into this, but obviously things changed really hard in
15 March.

16 And so the team was very successful in that
17 energy and balance market and go live, and we're really
18 happy with the way that's worked out. I think we might have
19 set a new standard there, between us and Arizona and how
20 that came on.

21 So the second one is we just completed an audit
22 remotely and very successful, very collaborative, and I
23 think very productive at the end of the day. So we see
24 upsides to that. I think long-term for us it's really a lot
25 of focus right now on the office environment and what that's

1 going to look like. We're not going to make any sweeping
2 adjustments to the office environment until probably
3 September.

4 We're giving ourselves time to be very thoughtful
5 in what that looks like. My most important field activity
6 concern is just really making sure we keep our field workers
7 safe in this environment and the uncertainty going forward
8 continues to build on PPE like we've talked about.

9 Same with our control centers, just being very
10 diligent as we move forward into deeper into the year and in
11 taking on the disciplines that we developed through this
12 pandemic as I believe it's going to be -- this discipline is
13 going to be required for a number of months, so thank you.

14 MS. RODER: Thank you Mr. Haynes. Next up is Jim
15 Robb, go ahead Jim.

16 MR. ROBB: Hey, thank you. I'm just going to
17 make a couple observations. First of all I echo the
18 comments that Stan Connally made around the kind of being
19 able to do work which we traditionally did onsite remotely.
20 Again, we probably can't move all of it to that structure,
21 but certainly our regional entities feel that there's a real
22 opportunity to innovate some of our practices. Many of them
23 were put in place 15 years ago and obviously in a very
24 different world.

25 The other thing I wanted to -- and of course I'm

1 talking from a slightly different perspective, because I
2 don't have people who have hands on controls in the trades
3 that my colleagues on the panel do. But we got through an
4 extraordinary windfall of time liberated over the last three
5 to four months.

6 I mentioned the commuting. We operate in two
7 highly congested cities. So we think that the company has
8 probably gotten half of the commute time back as
9 productivity and half of that went to employee's families
10 and home lives. Not having to travel to every meeting as
11 opposed to being able to do it virtually has also unlocked a
12 tremendous amount of time.

13 So we've seen you know, at least a sustaining
14 level of productivity and maybe even an expansion. In fact,
15 the industry has told us several times that we're throwing
16 snow balls faster than they can catch right now.

17 So we've had to slow down some of our work
18 because our engagement and interaction with industry is so
19 important to the quality of the work that we do. I do agree
20 that looking forward, you know, that there's going to be
21 some balance of remote work, which could be work from home
22 and in-person connection because an organization only
23 achieves impact through influence.

24 It's important that we have engagement and
25 relationships with people. We can do some of that

1 virtually, but it's not a full substitute for the in-person
2 interaction. The one opportunity that I wanted to raise
3 though that we're getting our heads around is in many ways
4 this expands our labor pool because we can now -- if we get
5 comfortable with remote work, which we are getting much more
6 comfortable with as time moves on, we now have the
7 opportunity to recruit nationally without having to demand
8 someone relocate to Washington, D.C. or Atlanta.

9 And given that we have a tendency to want to go
10 after experienced labor, workers, you know, engineers who
11 have subject matter expertise, the need not to uproot a
12 family and like I said relocate, I think becomes a very
13 strong recruiting draw for certain people.

14 So I see some upside in this from our
15 perspective, and I think we can use the technology that
16 we're being more and more familiar with and which I believe
17 will get better and better as time goes on to continue to
18 innovate the way we do our oversight work.

19 MS. RODER: Thank you Mr. Robb. Mr. Lyon I see
20 that your hand is raised as well, please go ahead.

21 MR. LYON: Commissioner, thanks for that
22 question. I think it's a really interesting question and
23 wow, the telecommuting technology really has been a true
24 blessing and enabler for you know, maintaining months of our
25 operations, really I think in some ways have exceeded all of

1 our expectations when you look at how reliable I think our
2 energy sources and transportation has been.

3 I do think -- I think there's a couple things we
4 should as we think about the new world, I'm talking next
5 year and others, is that one concern I have is you know, a
6 lot of times our innovation and creativity comes by being in
7 person with someone, and whether it's as you're walking down
8 a sidewalk or as you're talking at the coffee bar or just
9 being in the moment.

10 And I think that's going to be important to have
11 some aspect of that, because otherwise you will lose that
12 over time. And the other aspect I will just say, a concern
13 I have is what does that do to your company culture or your
14 safety culture? I think you know, we're all now used to
15 again talking to our computer screen, but you know, again
16 there's the personal side of that.

17 And I think Mr. Robb touched on that that it's
18 important to have those relationships in person too. So
19 that's one aspect, I think longer-term. I have a little
20 more skepticism on this newfound, you know, technology and
21 telecommuting.

22 The other piece I want to answer is more to the
23 later part of your question was around the long-term
24 planning or affect in how can FERC help. I think there's a
25 piece in there and I mentioned in my opening comments the

1 business planning is going to be really, I think, our
2 challenge.

3 You know, short-term, I think we're going to be
4 able to navigate, but business plan, when is demand going to
5 come back to our products or pipelines? What's that look
6 like? And then you apply that, and I think this is where
7 FERC really comes into play how pipelines are managed on the
8 business side is through index being in, you know, PPIs.

9 And I would say those systems necessarily aren't
10 conducive for a pandemic in unprecedented times. So we are
11 needing to keep and maintain our pipeline not only for the
12 short-term, but for the long-term, while the demand is way
13 off track and way different than what I think any of us
14 could have ever planned for or imagined.

15 So I think if FERC looks at that system, I hope
16 they take in consideration not just what they've always
17 done, but what's fit for purpose during this time and
18 unprecedented times based on the disconnect from our demand
19 and really to stress maintaining safe and reliable
20 operations. A really important question and I think FERC
21 definitely has a place in it.

22 And I go back to you know at the beginning.
23 Chairman Chatterjee said you know, we're all in this
24 together, and I think that's really important. We're all in
25 new times for all of us, so thanks for the question.

1 MS. RODER: Thank you Mr. Lyon. Commissioner
2 McNamee I'll hand it back to you, no other raised hands,
3 thank you. Commissioner McNamee I noted your mic is muted.

4 COMMISSIONER MCNAMEE: All right, can you hear me
5 now? I hope you can hear me now.

6 MS. RODER: Yes we can sir, thank you.

7 COMMISSIONER MCNAMEE: Okay. Well I gave this
8 great speech and I'm sorry you all missed it. But my only
9 point is that -- multiple points is that one, I appreciate
10 the comments and it confirms some of the things that I
11 thought were true but also gave me some insights into things
12 that I was not thinking about. So, I really appreciate
13 having you all take your time to inform us and that it's
14 been helpful to have this insight.

15 Likewise, IT even at FERC sees some of the things
16 that you all mention about productivity has been you know,
17 excellent, and anecdotally hearing about people happy that
18 they're not having to struggle with you know, traffic, and
19 having more time both to work and to be with families, and
20 so I think that is one of the silver linings that have come
21 out of all of this. And that completes my questions for
22 this panel, thank you.

23 MS. RODER: Thank you Commissioner McNamee. I
24 wanted to hand it over to Commissioner Danly to see if he
25 has any additional questions, or any questions he'd like to

1 ask.

2 COMMISSIONER DANLY: No. I don't have any
3 particular questions, but I appreciate the discussion and
4 I'm very heartened to see how adaptable industry has been
5 dealing with all of the unforeseen events of the last few
6 months. Thank you for everybody's time. I appreciate it.

7 MS. RODER: Thank you Commissioner Danly.
8 Chairman Chatterjee, we are handing it back to you in case
9 you have additional questions you'd like to ask of these
10 panelists, thank you.

11 CHAIRMAN CHATTERJEE: Thank you Aileen. I do not
12 have additional questions. My colleagues covered much of
13 the ground that I had hoped to cover, but should staff -- I
14 believe we do have some more time before the next break, so
15 at this point I would like to turn it over to staff for any
16 staff questions.

17 MS. RODER: Thank you very much Chairman and I
18 would invite staff, Amelia Lewis and David O'Connor if you
19 would like to ask any questions, thank you.

20 MS. LEWIS: Hi, thank you Aileen and thank you
21 for all the panelists for being here today. We touched upon
22 impacts and maintenance activities this morning and I'd like
23 to hear a little bit more about that. So how has COVID-19
24 impacted your maintenance activities and to what extent has
25 there been deferred maintenance? And are there concerns

1 about impacts due to deferred maintenance activities or
2 delayed completion of projects during the COVID-19
3 response?

4 And if there are concerns, how will these
5 concerns be addressed?

6 MS. RODER: Thank you Amelia. I see that Mike
7 Bryson has his hand raised. Please go ahead Mr. Bryson.

8 MR. BRYSON: Sure. Thanks Amelia. So one of the
9 things that we were pretty concerned about that early on
10 because our asset owners had those concerns themselves.
11 They're worried about what the impact is going to be on
12 crews, contract crews, staff coming in. And so we put
13 processes in place to help our stakeholder's kind of manage
14 that -- an ongoing survey to look at impacts to crews.

15 And as we have kind of looked at -- and some of
16 this is hindsight now, we didn't see as much impact on
17 rescheduling as we thought we would. We thought we would
18 see a tremendous amount. We saw a little bit. In my
19 submitted remarks I talk about some of the outages that were
20 either scaled back or delayed to the fall.

21 I think they're still manageable. We did have
22 some early concerns that they may be. It looks like the
23 asset owners really kind of tackled a lot of maintenance,
24 they may have triaged or prioritized some of it, but they
25 were able to really figure out how to protect the crews and

1 get the maintenance done in a pretty good way. So I think
2 we're going to be pretty set in the fall. We obviously have
3 some concerns about potential resurgences of COVID in the
4 fall and we'll have to manage through that, but the
5 rescheduled outages turned out to be very manageable.

6 MS. RODER: Thank you very much Mr. Bryson. I
7 will now call on Mr. Haynes, please go ahead Mr. Haynes.

8 MR. HAYNES: Yeah, thank you Amelia, great
9 question and I think across the board I agree with what Mike
10 Bryson just said. And also from the standpoint of project
11 delays, we did have to put some large capital programs on
12 the shelve. Part of that was because of international
13 workforce challenges in getting people into the country and
14 getting people into the state in particular.

15 We're just in the process now of remobilizing a
16 major overhaul at one of our large hydro stations, so that's
17 been on hold since early March. So that's underway. There
18 will be a cost to that, there will be and we've got extended
19 outages on the heels of that, so it's going to be sort of a
20 cascading effect going forward and delaying an overhaul
21 program at one of our large projects.

22 Listening, I guess a highlight on the T&D side
23 customer outages were pretty much stopped taking all planned
24 outages and a lot of outages even on the commercial sector,
25 importantly, because of home schooling, homework, everything

1 else people were really not happy about the notion of losing
2 power during the day or even on the weekends.

3 And so what that has done over the course of the
4 last three months is created a huge backlog in you know,
5 service connections, wire transfers, things like that that
6 are more of the routine nature in the T&D world. So that's
7 a big thing, a lot of catching up to do there, and then the
8 generation side, similarly you know, we started with about a
9 50 percent workforce in our original operations planning
10 staffing levels, and so there's only so much maintenance you
11 can get done with 50 percent of your workforce on any given
12 day.

13 And so catch up to be done there. We've been
14 focused on mainly on high priority work, on seasonal work
15 that is necessary for getting through the seasonal demands
16 of the hydro system, like run-off and things like that and
17 making sure our fleet was ready for all that and that's
18 definitely a challenge. And I would say deferred
19 maintenance is the reality to your point and something that
20 we are tackling real time, so thanks for that question.

21 MS. RODER: Thank you very much Mr. Haynes. I'm
22 going to call on FERC staff member David O'Connor to ask a
23 question.

24 MR. O'CONNOR: Yes, good morning everyone. I
25 want to thank everyone for participating and I found it to

1 be very useful. One question that I kind of want to
2 follow-up on that's been touched a little bit, but maybe if
3 we can get one or two specifics is that sorry, is basically
4 some states have been putting down travel restrictions or
5 quarantine restrictions upon people coming in from other
6 states, particularly where there's been hot spots.

7 So I'm just kind of curious as to is there
8 anything that the company's been doing on an outreach with
9 the state and local jurisdictions with regards to possibly
10 the potential for mutual assistance crews, or bringing in
11 specialized contractors to help work on projects, you know,
12 where they have to get across state borders?

13 Has there been any sort of outreach that
14 companies or organization have done with those
15 jurisdictions? Thank you.

16 MS. RODER: Thank you very much David. The first
17 hand I see raised is Mr. Haynes, please go ahead Mr. Haynes.

18 MR. HAYNES. Yeah, great question. Washington
19 State, like a lot of other states I'm sure did early on put
20 down a lot of the restrictions you're talking about and some
21 of that involved things like 14-day quarantines if you're
22 coming from a non-contiguous state or from out of country
23 and in those situations.

24 And as I mentioned just a minute ago, as we
25 start-up overall, that does require a workforce from Canada

1 and other places way outside of Washington State. We had to
2 -- we did do outreach to the state because of that very
3 notion of not really wanting to have to quarantine a
4 significant construction workforce near a hydro plant for 14
5 days before we could let them on to the project.

6 So actually the state was very helpful in working
7 through prescriptions and guidelines that they were
8 comfortable with that we could implement onsite, including
9 testing and obviously all the onsite provisions that I'm
10 sure everybody's doing. But I think that was a successful
11 one, and I think the state's been very I guess flexible, in
12 helping the construction industry stand up and utility
13 industry in particular has been very, I would say engaged
14 at the state level because of the need for private sector
15 contractors as well as public sector construction activities
16 in the public right-of-way.

17 And so I think it's gone really well. I think
18 the state has been very effective and helpful in working
19 with us to get through that. Obviously, there's always
20 challenges to the implementation and things like that, but
21 it's always good to have a partner that can work with you
22 and be very responsive in some cases at the state level.

23 We get responses back, you know, within 24 hours
24 which is incredibly helpful when you're in the construction
25 of oil. So great question.

1 MS. RODER: Thank you very much Mr. Haynes. I
2 think we have time for one last question. I will ask Amelia
3 Lewis from FERC staff to ask it, thank you Amelia.

4 MS. LEWIS: Hi, thank you. I actually have a
5 question from Joe McCall in the Office of Energy
6 Infrastructure Security. The question is based on lessons
7 learned from this pandemic, what type of investments or
8 measures might be necessary to prepare for the next
9 pandemic? For example, should PPE, sanitizers or other
10 spare equipment be stockpiled and rotated as necessary to
11 ensure employee's protection and continuity of operations?

12 MS. RODER: Thank you very much. I see that Mr.
13 Bryson has his hand raised. Please go ahead Mr. Bryson.

14 MR. BRYSON: Yeah, this is Mike Bryson. So I
15 think that's a good question and I know a number of the
16 panelists have kind of touched on it in different ways. And
17 you know, one of the things about if we're thinking about a
18 resurgence, then some of those stockpile issues and PPE and
19 testing supplies are something we at least know what to put
20 our finger on and yes I think we should be looking at ways
21 to do that.

22 I think as we kind of discussed, the ESEC is very
23 focused on that right now and so whatever level the federal
24 agencies can kind of support, the ESEC efforts in that area.
25 But it really has longer term implications because we don't

1 know what the next pandemic is going to look like.

2 And so in that case, PPE and testing can become a
3 whole new starting point. And so we may need some
4 assistance from the Health and Human Services about how we
5 look at broader protective equipment that goes beyond COVID.
6 So I think that may be an area we can focus on maybe next up
7 at the ESEC, thanks.

8 MS. RODER: Thank you very much Mr. Bryson. The
9 last hand I see raised is Mr. Lyon. Mr. Lyon go ahead.

10 MR. LYON: Yeah, thanks for the question. I
11 think, you know, after any emergency response we always have
12 with the hot washer, you look back at what could we do
13 better for the next one. And I think overall the system
14 utilized incident command structure was very effective.

15 And the beauty of that is you don't know all the
16 details and we won't know all the details for the future
17 pandemic, but having a structure or a mechanism to navigate
18 it is critical, so to continuing those drills would be
19 important.

20 You know as far as supplies and other things I
21 would say our business continuity planning served us well.
22 I'm sure that we wished we had more N95 masks, or you know,
23 sanitizers, and we'll look at those type of things, but
24 those are really -- I'll call them tweaks to what we did in
25 the past -- what we're doing in the past few months.

1 You know I think the biggest takeaway for the
2 next pandemic, I think we've all learned how quickly this
3 economy and this business can be put on its head, and I
4 don't think anyone starting at the beginning of 2020 would
5 have ever imagined how it would, you know, bring our economy
6 to a halt.

7 And you know, we say it 50 percent demand
8 destruction. And I don't think anyone in the pipeline
9 industry would have ever imaged or planned for that. So
10 understanding how fluid on the business front and how you
11 have to be prepared for that as an organization to have not
12 only a safe, reliable business but a viable business.

13 And you know, as we've mentioned, how long this
14 is going to last is really going to be even a harder test
15 for all of us, how we navigate that. So I think it's
16 important for us to look back to that, but I would say the
17 biggest piece is how do you help navigate demand destruction
18 that can happen overnight for a long, extended periods of
19 time.

20 MS. RODER: Thank you very much Mr. Lyon.
21 Chairman Chatterjee, we are ready to call for the lunch
22 break if that works okay for you.

23 CHAIRMAN CHATTERJEE: Yes, that's great. I just
24 want to again thank all of our panelists. I thought that
25 was a fascinating and thoughtful discussion thanks to Aileen

1 and staff and to my colleagues, and everyone is doing great.

2 MS. RODER: Thank you very much Mr. Chairman. So
3 I will say thank you to all the panelists. We appreciate
4 your participation today. We'll now have an hour and 30
5 minute lunch. We will begin Panel 2 at 1:30. Panel 1
6 panelists please sign out of Webex.

7 To the extent you want to continue viewing the
8 Technical Conference, please view it through the livestream
9 link on the Commission's event calendar. We ask that the
10 Chairman, Commissioners and telecommute panelists be online
11 around 1:00 p.m. so we can run through any technical
12 logistics and have time to make sure that everyone can
13 connect properly. Thank you very much everyone viewing, and
14 we will see you again at 1:30.

15 (Lunch Break)

16 Panel 2: Electricity Demand and Transmission Planning

17 MS. RODER: Okay, we're going to get started with
18 Panel 2. Panel 2 is entitled "Electricity Demand and
19 Transmission Planning." I want to thank so much all the
20 panelists for joining us today. And they joined us early so
21 we could ensure there weren't any technical issues. Thank
22 you to the Commissioners and the Chairman and everyone out
23 there viewing this virtually.

24 Repeating a couple reminders from this morning.
25 We're going to have each panelist can do an up to four

1 minute opening statement. At that time we'll begin a
2 question answer session. We'll take a break, 15 minutes,
3 part-way through this panel and just a quick reminder as we
4 begin this panel, to all participants please refrain from
5 any discussion of pending contested proceeding.

6 Unfortunately, if anybody engages in that kind of
7 discussion, we'll have to interrupt and ask the speaker to
8 avoid the topic. Okay, we'll call each panelist in terms to
9 give his or her opening statement. I will now turn it over
10 to Mr. Stefan Bird. He is the President and Chief Executive
11 Officer of Pacific Power, speaking on behalf of PacifiCorp.
12 And I will say please go ahead Mr. Bird, thank you.

13 MR. BIRD: Thank you very much. And thank you
14 Chairman Chatterjee and Commissioners for the opportunity to
15 speak with you on the importance of transmission planning in
16 a COVID-19 environment.

17 As noted, I represent PacifiCorp which serves
18 approximately 2 million customers across six western states.
19 As part of my role, I oversee PacifiCorp's transmission
20 system operations which is the largest privately held, owned
21 grid in the Western United States which spans 16,500 miles
22 across 10 states and nearly 200 interconnection points with
23 11 adjacent balancing authority areas.

24 First and foremost I want to share that
25 PacifiCorp has answered the call during these challenging

1 times and will continue to be there for our customers.
2 We've been challenged by a wave of natural disasters
3 including not only the pandemic, but just before the
4 pandemic began, we had a historic 5.792 earthquake in Salt
5 Lake City.

6 None of these challenges have impacted our
7 ability to deliver our core mission for safe, affordable or
8 reliable service to our customers. Even that earthquake
9 that occurred in mid-March and at it's peak impacted 75,000
10 customers demonstrates the resilience of our network and we
11 exercised our practice procedure to immediately dispatch
12 control operation from Salt Lake City to Portland, and were
13 able to serve 70 percent of our customers within six hours
14 and 100 percent within about 15 hours.

15 I'm very proud of our employees, particularly our
16 front line workers and I'm proud of the resilience of our
17 communities. In particular, as wildfire season is now in
18 full swing across the west, and is notably unabated by
19 COVID-19, I'm proud to say our operational teams are well
20 positioned.

21 We continue to coordinate with states and
22 community officials during the wildfire season, we're
23 forging new partnerships with industry and federal agency
24 while pursuing advanced technology and hardening of our
25 network to mitigate wildfire risk.

1 While COVID-19 has had dramatic impacts in many
2 respects, transmission remains more central than ever, now
3 and into the future to enable the achievement of a primary
4 unchanged mission, which is delivered safe, reliable and
5 affordable energy to meet customer demands across the west.

6 Our energy across customer segments has changed,
7 however the overall total load on the system has remained
8 relatively unchanged and we anticipate small year over year
9 increases over our 10-year planning horizon.

10 Because forecasted economic activity remains
11 strong and infrastructure returns are long, even with
12 COVID-19, we are focused on maintaining and developing a
13 robust transmission network and efficient market. These
14 measures will ensure that we're able to integrate an
15 extraordinary volume of renewable resources both reliably
16 and cost effectively and lend us the inherent diversity of
17 Western resources for a clean energy future that is
18 foundational to that transmission grid.

19 We continue to execute our 6 billion dollar
20 energy gateway transmission expansion plan advanced more
21 than 10 years ago, which will advance both grid reliability
22 and resilience and accelerate the region integration at more
23 low-cost renewable resources.

24 Our transformative 2019 integrated resource plan
25 for FERC portfolio, continues to reflect the least cost,

1 least risk for customers under a wide range of future
2 scenarios. And that plan includes over 6 gigawatts of new
3 renewable storage and transmission by 2023.

4 With this Commission's leadership and support, we
5 continue to partner with the California ISO and our
6 neighbors across the West to grow the Western energy and
7 balanced market. We're also engaged in positive processes
8 to evaluate the potential for the day ahead market as well
9 as potential new resource adequacy market that's being
10 developed by the Northwest Power Pool.

11 PacifiCorp is taking an active leadership role in
12 both of these efforts and promise to optimize the less
13 abundant, the most recent was to bring greater value to our
14 customers. Commission led policy, such as transmission
15 incentives, along with siting reforms, and tax incentives,
16 will collectively help transmission get wealth and overcome
17 economic challenges to enable new additions to the grid.

18 Transmission is inherently dynamic, long-term and
19 multi-value in nature and will further bolter reliability
20 and resilience of the existing system as well as both energy
21 that's need for future generation technologies. We support
22 all of these measures.

23 In closing, I am firmly optimistic about the path
24 forward and thank you for this opportunity and I look
25 forward to answering any questions you may have.

1 MS. RODER: Thank you so much Mr. Bird. We
2 really appreciate it. We're going to pause for one minute.
3 There's apparently a bit of a technical problem with the
4 livestream, so if everyone can just hold on, and we
5 appreciate your patience.

6 Thank you for your patience. Sometimes these
7 things happen in the virtual world. Thank you very much and
8 we will now go on to Travis Fisher. He is the President
9 and Chief Executive Officer of ELCON. Please go ahead Mr.
10 Fisher.

11 MR. FISHER: Hey thanks. I'm grateful for the
12 opportunity to join this group to discuss the impacts of
13 COVID-19 on industrial consumers, in particular and the
14 broader implications of COVID-19 for the electricity sector.

15 ELCON is short for the Electricity Consumer's
16 Resource Council and for over 40 years, ELCON has
17 represented large industrial consumers of electricity. Our
18 member companies produce a wide range of products and
19 services from virtually every segment of the industrial
20 community. ELCON members are consumers of electricity and
21 in the footprints of all organized markets and other regions
22 throughout the United States.

23 Reliable electricity supply at just and
24 reasonable rates is essential to our member's operation.
25 The COVID-19 pandemic has impacted everyone from the

1 smallest mom and pop businesses to the largest international
2 corporations, some of which ELCON represents. For example,
3 according to industry reports, more than 100,000 workers
4 have been forced out of the oil and gas industry since the
5 end of February.

6 And those who remain on the job are facing pay
7 cuts and the industry in general will likely recover more
8 slowly than the rest of the national economy. So clearly,
9 these are challenging times as we can all see from the fact
10 that many of us are still working from home.

11 I just want to take a moment to congratulate the
12 Commission on working so effectively during this trying
13 time. I recall months ago when I was still on staff at FERC
14 and we got a visit from Anton Porter and Mark Radlinski and
15 they first let us know how bad the situation was and that we
16 would be working from home, et cetera and I think FERC has
17 handled it incredibly well. So the Chairman and FERC staff
18 should be commended.

19 In the interest of time, I'd just like to
20 highlight a couple of concerns that ELCON members have as
21 you navigate this pandemic. And I'll also give an example
22 for what our members are doing to help.

23 First, as large industrial consumers of
24 electricity, ELCON members place a particularly high value
25 on electric reliability. Even a small glitch can shut down

1 a manufacturing facility for days and cost millions of
2 dollars.

3 As NERC points out, elevated risks are likely to
4 continue throughout the summer, and risks may -- new risks
5 may emerge. So we thank NERC for its efforts to ensure that
6 power quality remains high, it's very important to us.

7 Second, industrial consumers are very sensitive
8 to the cost of electricity. Just and reasonable rates are
9 critical for our members to keep costs low and compete in
10 international markets. ELCON members are concerned about
11 the impacts to rates that may result from some utilities
12 attempting to recover costs connected to COVID-19.

13 Such rate treatment maybe styled as a recovery of
14 fixed costs, but in fact could be something of a true up for
15 lost revenues stemming from demand slumps due to COVID-19.
16 We have seen filings along those lines at the state level in
17 states like Indiana, Wisconsin, Louisiana and elsewhere and
18 ELCON members find this trend very concerning.

19 At the federal level, ELCON encourages the
20 Commission to take a close look at any filing that may
21 include COVID-19 related costs to ensure that they are in
22 fact just and reasonable. We see it as a fairness that
23 certain segments of American business should not be singled
24 out to be made whole at the expense of consumers.

25 Along those lines there's a great piece in the

1 utility bag by Travis Covullo that we site in our final
2 statement. I encourage everyone to read that piece. I want
3 to close on a high note and discuss how ELCON members are
4 helping. Some of our members produce the isopropyl alcohol
5 used in disinfectants and has increased their production.

6 Other members manufacture industrial gasses,
7 oxygen is used in a steel-making process, but it's also used
8 in the medical field, they prioritize the supply of oxygen
9 used in the medical field to help hospitalized COVID-19
10 patients.

11 Others like the auto manufacturers have shifted
12 their manufacturing efforts to focus on things like
13 ventilation systems, personal protective equipment like face
14 shields and masks.

15 In closing, ELCON is proud of the work that our
16 members do, and we are especially proud of the way they
17 continue to put the safety and health of their employees,
18 customers and communities first, thank you.

19 MS RODER: Thank you very much Mr. Fisher. We
20 appreciate it. And next is Robert "Mac" McLennan, President
21 and Chief Operating Officer for the Minnkota Power
22 Cooperative. Please go ahead Mr. McLennan.

23 MR. MCLENNAN: Thank you. I appreciate the
24 opportunity to be a part of today's discussion on COVID-19's
25 impact on our nation's electric demand and subsequent

1 infrastructure planning. I thank the Commission for holding
2 this Technical Conference to try to get a better sense of
3 what's happening within that space.

4 The electric grid is facing considerable
5 transformation that will only increase in magnitude and
6 importance in the future. Impacts of COVID are just added
7 to those of others that are impacting transmission and
8 generation decisions around the country today.

9 Minnkota is a relatively small, not for profit
10 generation and transmission cooperative headquarters in
11 Grand Forks, North Dakota, we serve primarily the east half
12 of North Dakota and the west side of Minnesota. Our members
13 primarily rural communities, pretty large, 34,000 miles
14 square area which translates into us having about 33,000
15 miles of transmission lines and 249,000 sub-stations with
16 limited or smaller numbers, obviously with consumers paying
17 for that.

18 Many of the -- I heard earlier Stefan Bird's
19 comments about what our mission statements are. We believe,
20 you know, many of the mission statements for electric
21 utilities look fairly similar, you know, deliver safe,
22 reliable, affordable and environmentally responsible energy
23 to the members that we all serve. However, we all do that
24 slightly differently and we all view what that means
25 slightly differently as well.

1 And those differences are becoming more
2 pronounced as rapid change continues to transform this
3 industry. It highlights the need for discussions like this
4 as we talk about the reliability of our grid and the
5 development of assets and resources both on transmission and
6 distribution side.

7 We're all trying to find ways forward to balance
8 our needs individually. We also, like most of the utilities
9 across the country, continuing to try to figure out what the
10 impact of COVID-19 is on our system and in our region.
11 Minnkota, fortunately, unlike some of the other utilities
12 around the country, hasn't seen some of the demand
13 destruction, or the substantial shifting that some utilities
14 are experiencing with respect to loads or needs.

15 We are, however, negatively impacted by those
16 shifts from the perspective of low energy market conditions
17 that may be driven by COVID and many other things that are
18 going on in the country and I'll talk some more as we go
19 through just concern surrounding the ability to what I would
20 describe as keep the lights on, in the upper Midwest as we
21 talk about 100 degree weather on the horizon and clearly for
22 us, 30 degrees below zero and more from a winter
23 perspective.

24 Our own system from Minnkota perspective, is
25 prepared for both of those extremes, but a part of that is

1 because we rely on to my knowledge, based on coal which
2 historically has performed whenever we ask it to do so,
3 whether it's 100 degrees outside or 30 degrees below zero.

4 Now so with difficult market conditions before
5 the pandemic, and economic losses in all systems sales, the
6 pandemic itself and COVID has really added to that I think,
7 to make it a much more serious challenge. So it's also, I
8 would say, difficult for us to segregate today what are the
9 impacts of COVID-19 against what might have been slightly
10 warmer winter, slightly warmer spring, and so as we continue
11 to look forward, it's really trying to get a better grip on
12 how long the impacts of COVID-19 will be in place.

13 Arguably, where we live there aren't a lot of
14 skyscrapers you know, with lots of people in them. Most of
15 the businesses that we have have been must run businesses
16 and so we have continued to try to figure out how to manage
17 around that.

18 I'll also add just as in closing here kind of
19 from a broader political perspective, we could have taken
20 what I think is a long-term view, which may or may not be
21 the path forward as you look at the changing infrastructure
22 in the world. But we've taken a long-term view, we've tried
23 to innovate. We have arguably one of the most demand
24 response, or most aggressive demand response programs in the
25 country and our latest effort is to try to figure out how to

1 do the largest carbon capture project in the world on our
2 assets.

3 And so I look forward to the rest of the
4 discussion and some discussions about the market and
5 transmission as we move forward.

6 MS. RODER: Thank you so much Mr. McLennan.
7 We're going to take a five minute break everyone.
8 Unfortunately, there's a technical issue and we need to take
9 care of something. Those who are on the livestream, you
10 will probably have to sign back on. We truly apologize for
11 this issue, but these days they can be these kinds of
12 problems when we have a lot of people on a virtual stream.
13 So thank you very much, thank you for your patience, we
14 genuinely appreciate it and we'll see you in five minutes.

15 (Break)

16 MS. RODER: Hi everybody. We thank everybody
17 very, very much for your patience. Many of the folks out
18 there have seen the earlier speakers but the audio was a
19 little broken up, so we've been trying to alleviate that so
20 that everyone can hear very clearly.

21 So now, moving on we're going to have Clair
22 Moeller, President and Chief Operating Officer from
23 Midcontinent Independent System Operation, on behalf of the
24 ISO/RTO Council, and Mr. Moeller I give the floor over to
25 you, thank you very much.

1 MR. MOELLER: Thank you and good afternoon
2 Chairman and Commissioners. I look forward to the
3 opportunity to discuss the impacts of COVID-19 on our system
4 and involve system operations and planning. The MISO as you
5 perhaps recall, has about 72,000 miles of high-voltage
6 transmission and 175,000 megawatts of generation that we
7 have added on behalf of our members.

8 We are very large and skilled geographically, not
9 unlike Matthew's part of our footprint. We sometimes joke
10 that we're a coast to coast RTO, but it's from Hudson Bay to
11 the Gulf of Mexico. Manitoba is an important partner in the
12 market and their hydro system at this point in time is
13 behaving very well and helping things.

14 MISO is a member of the ISO-RTO Council and while
15 my prepared remarks reflect predominantly our MISO
16 experience, I did coordinate with the IRC members for
17 feedback on their experiences. I believe you've heard from
18 some of them earlier today.

19 The RTO community has been working together and
20 coordinating our efforts throughout this epidemic to show
21 relevant information and best practices to mitigate the
22 impacts of COVID-19 on the power system. Regardless of
23 where you live, there's been a real and terrible impact of
24 COVID-19, even if our individual employees have not felt the
25 worst of what COVID-19 can bring, it's surely impacted how

1 we all live and work.

2 Our priorities through this period of time have
3 been first to protect the integrity of the electric grid,
4 and second to protect the health and safety of our
5 employees. MISO has leveraged its regional model to help
6 ensure continuous operations. We benefit from having four
7 geographically separate control rooms that act as a buffer
8 against the spread of the virus within our facilities and
9 employee base.

10 While COVID-19 does not -- has not adversely
11 impacted the reliability of the system, we have observed
12 impact operations and are adapting to those changes as they
13 occur. First, turning to load impacts -- we have observed a
14 system-wide demand was down during the spring as a result of
15 COVID-19 related closures.

16 We estimate demand dropped about 11 percent in
17 May, but we are seeing a gradual recovery of load since
18 then. The load in June measured about 5 percent lower than
19 normal as the stay at home restrictions began to ease.
20 There is some anecdotal information across the last four or
21 five days that in hot weather we are actually seeing more
22 demand than we had anticipated and now some of our
23 colleagues are seeing that too.

24 So whether that is actually COVID related it's
25 hard to tell -- the data isn't exactly a trend. We have

1 observed changes in the load profile. Mostly it's a
2 flattening of the profile and has reduced the requirement to
3 ramp the system to meet demand. That contrasts
4 significantly, with Polar Vortex kind of problems where the
5 ramp problem is exacerbated by those cold weather events.

6 We are observing higher than usual load
7 forecasting errors. One of the tools that we all use in
8 machine-based learning are all network, but if you don't
9 have history it can't help you with the future. As to the
10 conditions on transmission and generation outage scheduling,
11 we have seen some deferrals, some of our tight conditions
12 across the last two days where some of those deferred
13 generators having trouble getting back into service.

14 We only have four months of experience with this
15 event. We expect the situation to continue to be fluid
16 through the future. We have asked and received some minor
17 waivers from the FERC which we are grateful for to execute
18 things like our generation interconnection to working.

19 Practically speaking, we don't see this as having
20 a long-term transmission planning impact. Essentially the
21 load in the MISO footprint has been flat since about 2007.
22 And the dominant transmission we are building is to
23 accommodate the change in generation suite.

24 We do have CR members changing those plans, so at
25 this point in time we don't see a need to adjust any of our

1 planning practices, but of course we'll keep that front and
2 center because that's one of the more important parts of
3 what we do.

4 With that I'll close my prepared remarks and look
5 forward to your questions, thank you.

6 MS. RODER: Thank you so much Mr. Moeller. Up
7 next is Curt Morgan, President and Chief Executive Officer
8 of Vistra Energy. Mr. Morgan, please go ahead.

9 MR. MORGAN: Okay. Good afternoon Mr. Chairman
10 and Commissioners and thanks for the opportunity to be on
11 this panel and address the impacts of COVID-19 on the
12 electricity sector. Also, I want to send a thanks out to
13 the staff in putting this program on and so I know how
14 difficult it can be to kind of do these livestreams, we do
15 one once a week and that's no easy task.

16 Just a little bit of background on Vistra. Some
17 of you may know us but we're an integrated competitive
18 electric generation as well as electric and natural gas
19 retail company. We've got about 39,000 megawatts, diverse
20 generation, you know, mainly natural gas, nuclear,
21 renewables and batteries, but we also do have coal and we
22 have had a fair amount of return to some coal and expect
23 that to continue over the next few years.

24 We have roughly 5 million customers operating,
25 and we also operate in six of the seven competitive markets

1 in the U.S. as well as in 20 states and the District of
2 Columbia. We have over 250 competitive retail electricity
3 offerings and over 40 green offerings.

4 The cornerstone of our strategy is integrated
5 operations, strong balance sheet, low cost, sophisticated
6 commercial skills. You know we cannot execute our strategy
7 without a fair and even playing field for all generation
8 technologies and FERC has historically done a great job of
9 ensuring just that.

10 Likewise, a competitive power market cannot
11 function in a reliable and affordable manner with the
12 current technologies without a diverse set of resources,
13 including dispatchable generation. Market forces are
14 working in ultimately the most equitable way to incentivize
15 new technologies with low to no carbon emissions, a history
16 of market-based carbon pricing mechanism which we believe
17 can be implemented on a regional basis.

18 I'd like to highlight the extraordinary efforts
19 by the industry personnel who have continued to work at the
20 generation plant and in the dispatch to keep operations in
21 market, and markets working smoothly. At Vistra, we have
22 over 3,000 team members that have continued to report to
23 their worksite, along with 2,500 contractors that worked on
24 86 maintenance outages this spring to be ready for the
25 summer, and all of that with no COVID positive test

1 contracted at work, and we're very proud of that fact.

2 We believe very early implementation of
3 temperature testing most notably, but also travel
4 restrictions, work from home, and also the questionnaires
5 that we ask all employees as they enter the site, were very
6 helpful in combating that in the early stage.

7 You know COVID-19 you know, and associated
8 reduction in economic activity have led to substantial
9 uncertainty into the economic and further uncertainty as to
10 you know, when and how we're going to recover. Uncertainty
11 in financial markets is sort of the kiss of death really at
12 the end of the day. It impacts capital availability
13 resulting in potential financial weakness for companies in
14 their long-term sustainability.

15 The multitude of market rule changes in FERC
16 jurisdictional markets over the last several years, many
17 driven by out of market activities and the unpredictable and
18 uneven pace with which these changes are implemented, have
19 created sector-specific risks for integrated competitive
20 energy companies like Vistra, and created questions in the
21 minds of investors about our sector.

22 With this uncertainty in mind, for written
23 statements, I offered a few points that may be of some note,
24 but I will touch on a couple of them very briefly. You know
25 in our view, first of all we think the Commission and the

1 staff have done a tremendous job during the COVID-19
2 situation, and we believe that's the single most important
3 thing the Commission can do right now is to continue to work
4 expeditiously on pending matters affects the applicable
5 ISOs to implement FERC orders as quickly as possible to
6 ensure regulatory certainty.

7 Certainty is important for financial markets.
8 It's also important for our customers and so we think that
9 certainty is important, so we appreciate what the Commission
10 has been able to do. It's not yet clear whether the
11 COVID-19 will materially add to the financial sectors some
12 resources that they are experience, you know, it's just hard
13 to tell, you know.

14 But I sure know that our company is feeling some
15 of the pressures and I outlined that in some of the written
16 comments that I had. You know, at Vistra we took actions,
17 not because of COVID-19, but we took actions almost four
18 years ago to put our company in a position to withstand a
19 crisis by significantly reducing our debt and reducing our
20 costs and enhancing margins.

21 We did that to the tune of almost a billion
22 dollars per year and we reduced debt by over 3 billion. We
23 simply found ways to compete without any helping hand. Now
24 more than ever, the Commission needs to remain supportive of
25 competitive markets to ensure all resources compete on a

1 level playing field.

2 I know it's hard to envision when we're going to
3 come out of this, the timing of which is very difficult to
4 know. And we expect that frankly, until we get a vaccine
5 and/or a therapeutic, effective therapeutics -- it's going
6 to be an uneven economy with fits and scarfs, but our advice
7 in this is not to take the early effects of COVID and
8 extrapolate those too far into the future.

9 We don't know enough about what's going to happen
10 and we certainly don't want to contribute to long-term
11 ripple effects. In closing, we commend FERC, ISOs and
12 market participants for performing their critical services
13 in an exemplary fashion, but you know, as Yogi Berra said,
14 "It ain't over until it's over," we have the summer staring
15 us straight in the face and we all must continue to perform
16 regardless of the virus, and people need to go to work and
17 we need to keep them safe as companies.

18 And people are counting on us every day. It is
19 vitally important for the Commission to continue its normal
20 business practices as much as possible, albeit in a safe and
21 healthy manner and pressed for timely implementation of
22 Commission orders to ensure fairness and stability in
23 comparative markets.

24 Thank you again Commissioners, I look forward to
25 questions and the discussion, so thanks.

1 MS. RODER: Thank you so much Mr. Morgan. We'll
2 now have Gil Quiniones, President and Chief Executive
3 Officer of the New York Power Authority. Please go ahead
4 Mr. Quiniones.

5 MR. QUINIONES: Thank you. Chairman Chatterjee
6 and Commissioners, thank you for allowing me to participate
7 in today's FERC Technical Conference. Representing the
8 public power industry and the New York Power Authority, I
9 will address the impact of COVID-19 on electric demand,
10 operations, planning and infrastructure development .

11 I would like to observe a t the outset that the
12 electric industry is doing an exemplary job of maintaining
13 reliable service while managing through the many challenges
14 presented by the pandemic. Trade groups like the American
15 Public Power Association, Large Public Power Council and
16 collaborative bodies, such as the Electricity Subsector
17 Coordinating Council, in coordination with government
18 partners, are supporting collective industry response
19 efforts. They include the sharing of planning
20 considerations and mutual aid for utilities particularly
21 impacted by COVID-19.

22 I am hopeful that the collective industry
23 response to the emergency so far bodes well for addressing
24 the longer-term impacts of COVID-19, and I commend the
25 Commission for convening this conference to explore some of

1 these multi-year challenges.

2 As you may know, NYPA generates approximately 25
3 percent of New York State's power and owns and operates
4 one-third of the bulk electric transmission system in the
5 state. The Governor of New York, Andrew M. Cuomo has set a
6 bold goal of supplying 70 percent of the state's electricity
7 with renewable sources by 2030 and a 100 percent carbon-free
8 electric system by 2040. Regrettably, the ongoing global
9 pandemic has made this vision of a sustainable future more
10 challenging.

11 New York, one of the original epicenters of the
12 COVID-19 Pandemic, experienced a nearly 10 percent reduction
13 in electric load statewide at the height of the pandemic.
14 In addition, New York State's strong economy -- a prime
15 driver of the state's electric load, has seen a decline, and
16 might not return to 2019 levels for quite some time.

17 This is consistent with projections that the
18 national economy might take a while to bounce back. This
19 reduction in load and the uncertain pace of recovery will
20 have a direct effect on planning the much needed expansion
21 and upgrades to major power infrastructure.

22 While transmission planning might be difficult,
23 now is the time to invest in the power grid to meet clean
24 energy goals and to help restart the economy. In addition,
25 it is also critical that we help address the

1 disproportionate impact of pandemics such as COVID 19 and
2 severe weather events on low income communities, especially
3 communities of color.

4 Specifically, the negative effects of
5 high-emitting and polluting power plants in urban centers,
6 and the corresponding health impacts, need to be avoided or
7 minimized as soon as possible. This objective can be
8 achieved by efficiently building out the transmission system
9 to carry clean energy supply from more rural areas to urban
10 load centers along with clean distributed energy resources.

11 Public power, moreover, has a strong interest in
12 improving grid system efficiency, reliability and resiliency
13 to serve its residents, communities and businesses. It
14 stands ready to collaborate with the FERC as it looks to
15 update its transmission planning processes, especially Order
16 1000, to support transmission investment. This approach
17 will bring more renewable energy and the innovation and jobs
18 that come with it, to environmentally and historically
19 overburdened communities.

20 Thank you for this opportunity and I look forward
21 to answering your questions today.

22 MS. RODER: Thank you so much, we really
23 appreciate it. Our next panelist is Sam Randazzo, Chairman
24 of the Public Utilities Commission of Ohio. Please go ahead
25 Chairman Randazzo.

1 CHAIRMAN RANDAZZO: Thank you. Can you hear me
2 all right?

3 MS. RODER: Yes we can, thank you very much sir.

4 CHAIRMAN RANDAZZO: Great. Mr. Chairman,
5 Commissioners and Commission staff, colleagues and
6 stakeholders, my name is San Randazzo as you already know.
7 I serve the citizens of the State of Ohio in the capacity of
8 Chairman of the Public Utilities Commission of Ohio as well
9 as Chairman of the Ohio Power Siting Board.

10 I need to begin by first saying that the views
11 that I offer here today are not necessarily the views of
12 either of these multi-member Ohio agencies, and I appreciate
13 the opportunity to participate in this panel and hope to
14 learn much from the experience.

15 In my oral remarks today I will summarize my
16 prepared statement which I ask to be included as filed. In
17 my prepared statement I provide some references to a
18 considerable amount of work that has been done by the North
19 American Electric Reliability Corporation and others with
20 regard to planning, both operational and reliability
21 planning, as they may be affected by a pandemic.

22 I suggest that this existing work be used by the
23 Commission and others to focus on risk presented by a
24 pandemic and identify ways to improve upon the already
25 significant efforts that have been undertaken to mitigate

1 these risks.

2 I then describe a two-market approach that I use
3 when addressing network infrastructure and operating or
4 planning reliability issues across a range of network
5 industries. I also observed that when attempting to resolve
6 these issues, I've worked to try and seek outcomes that
7 mimic the outcomes that would be produced by an effective
8 competition.

9 I conclude and I'll say this diplomatically, I
10 conclude that the current approach to transmission planning
11 leaves a lot of room for improvement, whether we are
12 measuring things from a point in time perspective, or from a
13 continuous improvement perspective.

14 In my attachment A, I illustrate the supplemental
15 and baseline transmission investment in Ohio and a very
16 significant increase in the amount of investment in the
17 supplemental category that is taking place and looks to
18 continue.

19 In my attachment B, I illustrate the sharp and
20 significant escalation in network service prices that has
21 taken place of a consequence of both significant amounts of
22 investment and in a context where there is low load growth.
23 In the last few pages of my prepared statement I offer four
24 suggestions and provide my underlying reasons, so that you
25 can look at my suggestions if you like.

1 The suggestions are as follows: Direct that
2 regional planners must thoroughly evaluate all projects and
3 investment that involve transmission functions that are
4 subject to FERC's ratemaking jurisdiction and ensure that
5 the regional planners have the requisite authority and
6 expertise to do so.

7 Number two. Seek a better balance between
8 solution provider's compensation and the business and
9 financial risk taken on by the solution provider. Recognize
10 the principle of gradualism as you apply the just and
11 reasonable standard and consider other rate design and rate
12 structure options to give customers more control over their
13 bill and provide better bill predictability. Consider the
14 introduction of zonal non-firm network service.

15 I thank you again for the opportunity and I will
16 conclude now. I look forward to the questions. I last
17 testified at the Federal Energy Regulatory Commission in
18 1976 as the nation was dealing with natural gas supply
19 shortages. I hope my contributions today do not lengthen
20 the interval of time between time and when I might visit
21 with you again. Thanks very much. I look forward to the
22 other presentations.

23 MS. RODER: Thank you Chairman. We appreciate
24 you being here today. Up next we will have Paul Segal,
25 President and Chief Executive Officer of LS Power. Please

1 go ahead Mr. Segal.

2 MR. SEGAL: Thank you. It's good to be with you
3 this afternoon. Chairman Chatterjee, Commissioners Glick,
4 McNamee and Danley and Commission staff, thank you for the
5 opportunity to participate today.

6 Just a quick minute on LS Power. We undertake a
7 broad range of activities including the development,
8 ownership and operation of a wide-range of power generation
9 assets here in the United States. We own one of the largest
10 demand response providers in the U.S. and one of the leading
11 companies providing electric vehicle charging.

12 We have also been a very active owner, operator
13 and developer of competitively sourced transmission projects
14 also in the United States. Because of the range of things
15 that we do my comments are fairly general and I will go
16 through them quickly.

17 I would really like to start by acknowledging the
18 heroic efforts of the plant and grid operators who continued
19 to show up to work risking their lives and well-being to
20 keep power flowing throughout the United States over the
21 last few months. We are forever grateful for their efforts.

22 We have also seen tremendous efforts by people
23 working on our construction jobs. With their help we have
24 delivered critical infrastructure on schedule across three
25 competitively awarded Order 1000 high voltage transmission

1 projects and one of the largest battery storage system
2 projects in the world that we are in the process of
3 commissioning today in California.

4 Our panel will be discussing the electric demand
5 and transmission planning and my key takeaway for you is
6 that COVID-19 must not be viewed by our industry as a
7 rationale to hat progress and defer planning and reform. I
8 worry that the easy takeaway from our very recent experience
9 will lead the industry to extrapolate forward to an
10 environment with lower demand.

11 I believe that our future is more complex and not
12 necessarily understandable through linear thinking. We
13 should expect and plan for a wide range of scenarios. These
14 scenarios must be viewed as bi-directional, pointing to the
15 possibility of greater energy demands and lower energy
16 demand, higher energy pricing and lower energy pricing.

17 Let me explain. I believe that the most
18 difficult economic parts of COVID-19 are hopefully behind
19 us. The Federal Reserve's aggressive action and fiscal
20 stimulus helped to take some of the most extreme downside
21 scenarios off of the table. Markets quickly halted their
22 freefall and returned to function.

23 A testament to this fact is that credit markets
24 are open to even some of the most impacted sectors of our
25 economy like aviation and cruise lines. Even the pipeline

1 companies like Kinder Morgan and Williams, the former MLPs,
2 can raise money. Their 10 year duration corporate unsecured
3 bonds are now trading at a yield to worst of between 2.5 and
4 3 percent.

5 Some of the most capable clinical and research
6 hospitals were the hardest hit by the early phases of
7 COVID-19. Over the course of just a few months, our
8 country's healthcare system has learned a great deal about
9 this disease and how to best treat it.

10 The ingenuity of our people and companies has
11 been released to tackle the disease. I expect that within a
12 year our perception of COVID-19 will be very different
13 because we will learn how to live with it. Our actions will
14 change the trajectory of the disease, we will learn how to
15 treat the symptoms to reduce severity and/or immunize
16 against it. But these changes in actions have an impact on
17 energy and electric demands.

18 From the perspective of electric demand and
19 forecasting I is easy to imagine and manage the downside
20 case -- we have been living it. Demand in certain regions
21 declined by close to 25 percent before beginning a gradual
22 recovery.

23 But it would be dangerous to extrapolate from
24 this recent experience and that's why COVID-19 tends to
25 trigger paradigm shifts. Today there are many paradigm

1 shifts happening all at once. That leaves us needing to
2 consider a number of questions about how these changes will
3 impact demand and usage patterns for electricity.

4 One key paradigm shift underway is the way that
5 we work. More working from home and less densification in
6 the office. Fundamentally, I expect that this will lead to
7 the less efficient use of space and as a result, the less
8 efficient use of energy, at least and including electricity.

9 The office electrical systems will need to run,
10 perhaps at a modestly lower capacity level than might have
11 been required otherwise, but more people will be at home and
12 this will lead to the use of electricity to heat, cool and
13 light the home when previously it might have been
14 unoccupied. In the aggregate, this may well result in a
15 meaningful increase in electric demand over the intermediate
16 term.

17 Work from home is also likely to drive demand for
18 natural gas. This could well be problematic in places like
19 New England where energy into the market is constrained by
20 infrastructure limitations in the winter.

21 These changes are non-linear and multifactorial.
22 They can often be derivative of one another. For example,
23 the recent collapse in oil prices has crushed drilling for
24 oil in many shale plays. The indirect consequence of this
25 will be a significant reduction in the availability of

1 essentially free associated natural gas.

2 Natural gas prices will need to incentive more
3 drilling for natural gas as we move forward. It is
4 conceivable that in this new paradigm, we will have natural
5 gas prices move into a range that's persistently 50 percent
6 higher than what we would have expected them to be before
7 COVID-19.

8 For example, \$3.00 - \$3.50 mmbtu may be the new
9 \$2.00 to \$2.50 mmbtu, the environment that we had
10 experienced recently. This would result in higher wholesale
11 prices for the first time in many years. It may allow many
12 coal and nuclear plants that have struggled economically for
13 years to prosper as they used to. It may make the need for
14 subsidies for these energy resources unnecessary. This may
15 also lead to a political response that pushes toward more
16 green energy investment.

17 The impacts of COVID-19 have been economically
18 devastating. As we focus on the road back we should keep in
19 mind that affordable electricity to a large extent, a
20 function of transmission -- is a function to a large extent
21 of transmission grid optimization.

22 Competitive procurement and regional planning of
23 transmission must remain a priority as we tackle
24 affordability going forward. The regional planning process
25 must be robust enough to enable the RTOs to plan for and

1 facilitate the construction of the power grid of the future
2 -- one that anticipates and supports the states' evolving
3 energy investment policies and goals, rather than sitting
4 idly by while every element of yesterday's aging grid is
5 simply rebuilt and replaced with the same thing as
6 facilities that have reached the end of their useful lives.

7 Also, irrespective of the ultimate direction of
8 electric demand, we must not lose sight of the critical
9 importance of reliability. We must continue to work --

10 MS. RODER: Mr. Segal?

11 MR. SEGAL: Yes.

12 MS. RODER: If you could finish up in the next
13 few minutes that would be helpful.

14 MR. SEGAL: Yes. We continue to work to ensure
15 the durability of competitive market constructs that promote
16 planning for a reliable electric grid. So as you can see,
17 the complexity in planning for the future in these
18 unprecedented times is why it's more important than ever to
19 understand that there is much that we do not know and as a
20 result we must plan for a broader range of outcomes.
21 Critically, we must continue to plan, innovate and execute,
22 and we must continue to focus on affordability and
23 reliability for the customer. Thank you.

24 MS. RODER: Thank you so much. We really
25 appreciate it. We're now going to begin our question answer

1 session for this panel. And we ask panelists if you would
2 like to respond to a question, please use the raise your
3 hand function and remember to take your hand down after
4 we've called on you.

5 We're thankful that all panelists are being
6 respectful of rule and ask them to do that during the
7 question answer portion and we also ask due to the technical
8 problem, we're not going to take a 15 minute break on this
9 panel. We appreciate everyone's attention and patience and
10 I will now turn it over to Chairman Chatterjee for his
11 questions.

12 CHAIRMAN CHATTERJEE: Thank you Aileen and thank
13 you to all the panelists. I'm going to jump right in. I
14 think my first question I'll direct to Mr. Moeller. You
15 touched in your remarks on the challenges arising from the
16 COVID-19 emergency and the impact it's had on load
17 forecasting. I just wondered if you could elaborate a
18 little bit more on the impact on load forecasting and
19 resource adequacy with respect to capacity markets and if
20 you could maybe get into a little bit on how RTOs and ISOs
21 have adjusted load forecasting in the short-term and the
22 long-term.

23 MR. MOELLER: Sure. In the short-term which is
24 the problem because the neural network that almost everybody
25 uses for forecast did not have a history to rely on. The

1 forecast that we initially provided physically was for too
2 much capacity to be on, rather than not enough.

3 So while the stakes were important in terms of
4 efficiency, they didn't have a negative impact on
5 reliability at all because technically we would start, you
6 know, one unit too many rather than one unit too few. Over
7 time those networks learned -- the forecasting tools learned
8 what the new load pattern looks like across the last few
9 weeks, our forecast and the forecast of the neighboring RTOs
10 have been pretty good.

11 It's the change from shut-down to reopening is
12 more gradual, so we're not seeing the kinds of errors as the
13 economy reopens if it were to shut down suddenly. So from a
14 liability standpoint it's been turbulent. It hasn't had a
15 negative effect.

16 In the long-term, at this point we haven't made
17 any adjustments in load forecasting. We follow the
18 scenario-based planning that the gentlemen from LS Power
19 talked about. We continue to think that the challenges to
20 the electric system have to do with the change in the
21 resource mostly, and then the question of electrification of
22 transportation is an important one that's in the you know, 5
23 to 10 year kind of time horizon, so one of our scenarios is
24 focused on that.

25 We tend not to try to make an actual prediction

1 of the future because that's full-term. We instead try to
2 bound what we think the future is across the various
3 scenarios. In terms of resource adequacy, what you'll be
4 seeing from MISO across the next month are a series of
5 adjustments to our resource adequacy protocols to manage the
6 uncertainty and reduce the risk of not understanding how
7 much capacity we actually have available on any given time.

8 One of the difficulties in reserve margin
9 calculations is it's a snapshot, but it doesn't actually
10 translate well into what we call operating reserves or
11 emergency reserves in the actual operating day. So you'll
12 see how it's adjusting how we count capacity. You'll see us
13 judging whether or not the capacity that does come to the
14 market actually is capable of the capacity that they've
15 credited inside our capacity program.

16 Just like every other RTO, we've got a clever
17 name for this, we call it RAM, which is resource
18 availability and mean. So refine, or tighten up all of the
19 calculations around that so that they operating day has a
20 very clear picture of what is available. Historically, when
21 we have margins in the 30 percent range, it actually didn't
22 matter. But now that we are at the minimum reserve margins
23 to keep it reliable, we feel the need to tighten up all of
24 that map to make sure we've got a very good plan going into
25 each operating day. I hope that was responsive to your

1 questions.

2 MS. RODER: I think we're ready for your next
3 question Mr. Chairman. I believe the Chairman might be
4 having technical issues, Chairman you are still muted.
5 We're ready for your next question. I think the Chairman
6 may be having technical difficulties.

7 So what we're going to do at this moment is
8 Commissioner Glick are you ready to go?

9 COMMISSIONER GLICK: Yes I am.

10 MS. RODER: Commissioner, can we ask you to go
11 next and we'll have the Chairman follow you, thank you.

12 COMMISSIONER GLICK: Absolutely, and if he needs
13 to get back in earlier that's fine too. Maybe I can pick-up
14 where the Chairman left off, because I was going to ask
15 about the forecast being slow. Maybe for Mr. Morgan and Mr.
16 Segal, in terms of you know, obviously it's very difficult
17 to forecast in general, certainly been more difficult as of
18 late in terms of the RTOs and ISOs who adjusted their
19 forecast as a result.

20 And I'm here and I'm supposed to be interested in
21 what's going on in the markets, whether you think the
22 process, the forecasting and the process and the chain that
23 the RTOs and ISOs have engaged in with regard to these
24 changes in the forecast have been transparent enough.

25 MR. MORGAN: Oh, you want me to go first?

1 COMMISSIONER GLICK: Yeah why don't you start.

2 MR. MORGAN: Look, you know, I think we have
3 pretty good access, you know, the team that we have with
4 what's involved and you know, with the RTOs and ISOs. The
5 access and transparency -- what I would say is there's --
6 (Internet audio disruption) and I think everybody you know,
7 isn't probably on this call is really kind of extrapolate
8 anything meaningful going forward from the effects of a
9 virus where, you know, human behavior is impacting, such as
10 not wearing a mask or going into a large crowd can change,
11 you know what's happening in a given state within a couple
12 of weeks.

13 And -- when we hedge, when we don't hedge these
14 types of things, we are looking for every bit and every
15 kernel of information so, you know, we're close to the state
16 governments, the governors, the elected officials, the PUCs
17 and we're trying to get as much information we can as early
18 as we can about what they're going to do in terms of whether
19 they're going to shut down, stay at home -- put in stay at
20 home measures again.

21 Because this thing is so fluid right now that you
22 really can't extrapolate off of it all. I don't know that
23 anybody saw what was happening now in the southern states
24 and in the West and in California again, basically. You
25 know, where all of a sudden, you know, this thing has taken

1 us by storm again, which is going to have a ripple effect.

2 So as I said in my opening remarks, I really
3 believe that until we get a vaccine or an effective
4 therapeutic, we're going to see these fits and starts and I
5 don't know how an ISO or FERC, or anybody -- clearly not our
6 company, can really extrapolate meaningful information.

7 We are basically grabbing information as it
8 happens. We're charting it on a daily basis, but then again
9 it's a whole different ballgame when you're trying to
10 extrapolate. Paul?

11 MR SEGAL: Thanks for the question Commissioner
12 Glick. I understand that --

13 MS. RODER: Mr. Segal, could I ask you to just
14 pause for a moment. The Chairman's computer has crashed,
15 and he was hoping to get back on to be able to hear your
16 response. Thank you very much. We will be back online in
17 just three minutes I think, thank you.

18 MS. RODER: Thank you Mr. Chairman. We were
19 partly through a response to a Commissioner Glick question.
20 I would propose we -- Mr. Segal was about to finish his
21 response. I would propose that we do that and then if
22 Commissioner Glick is okay with it, we can finish up your
23 questions and then ask Commissioner Glick.

24 CHAIRMAN CHATTERJEE: That's perfect. Sorry for
25 the inconvenience.

1 MS. RODER: And the Chairman was not aware of
2 what the question was. Commissioner Glick, can I please ask
3 you to just quickly mention what you had asked please, thank
4 you.

5 COMMISSIONER GLICK: Sure. I was just following
6 up Mr. Chairman, on your question regarding forecasting. I
7 was asking a couple of the panelists whether the ISO or RTO
8 processes that they've deployed in terms of updating these
9 forecasts, have had an impact or whether they're basically
10 transparent enough to market participants and Mr. Segal was
11 about to respond to that.

12 MR. SEGAL: Thank you. So I think the processes
13 are reasonably transparent as I mentioned in my opening
14 remarks. What I'm wondering about is that there is a level
15 of different RTOs obviously tackle this in different ways,
16 but there is -- there can be a tendency to fall back on
17 tools used in the past. And I do think that we're in an
18 environment that needs to consider again a much broader
19 range of possibilities.

20 We're going to be okay if we have too much
21 generation and too much transmission capacity. We're going
22 to have big problems if we're surprised and have less
23 generation available than we need as an example.

24 One pretty interesting dynamic is right here not
25 far from where I am in New York City, in New York City

1 they've had a massive decline in load and our office has not
2 reopened as the majority of the city has not. But we've
3 seen an increase in the load on Long Island. And we're
4 still very early in this changeover and new dynamics, new
5 ways that people will be living their lives during the
6 pendency of this event.

7 So I think more planning and planning for broader
8 ranges of scenarios is going to be very important and I
9 think it's a little bit too early to say whether we're
10 seeing that kind of thought process probably speaking.

11 MS. RODER: And thank you Chairman Chatterjee for
12 going next please.

13 CHAIRMAN CHATTERJEE: Thanks everyone for their
14 patience. Apologies for the technical difficulties and
15 thank you Commissioner Glick for yielding back the time.
16 Sorry about that.

17 I want to follow-up. I heard the tail end of the
18 response of Mr. Moeller before my computer froze up. I want
19 to shift a little bit, build on that and talk a little bit
20 about, and this is kind of -- it can go to Mr. Moeller, or
21 anyone else. I'm wondering what uncertainties surrounding
22 demand you guys are most concerned about or what you think
23 will most affect transmission planning.

24 MR. MOELLER: I have to find all the buttons so I
25 can be responsive. So the uncertainty for the entire

1 footprint is shifting it's fleet state by state the shifts
2 are quite different. The cost to achieve these shifts is
3 actually the biggest part of the puzzle. The most expensive
4 way to accommodate the shift are the new resources where
5 they are best geographically and build transmission. The
6 second most expensive one is to build all of the renewable
7 energy right at the load centers.

8 And so it will help to understand what people's
9 appetites are because of the diversity of the state policies
10 inside that, it's that state policy diversity that is the
11 most complicated factor in transmission planning. The
12 energy policy in North Dakota is certainly different than
13 the energy policy in Minnesota, for example.

14 And yes, to build effective transmission we have
15 to get to a spot where both those states see it in their
16 interest. So that's the puzzle that we're working on the
17 most. The large numbers of removals that our members have
18 an appetite for are unlikely to be accommodated by the
19 meter. The volumes are just so large that distribution
20 level would almost not be sufficient to meet their goals.

21 CHAIRMAN CHATTERJEE: Thank you for that.
22 Building on the question -- sorry.

23 MS. RODER: Chairman, I note that Mr. McLennan
24 has his hand raised as well, so would you let him respond as
25 well?

1 CHAIRMAN CHATTERJEE: Yes please, that'd be
2 great.

3 MS. RODER: Mr. McLennan, please go ahead.

4 MR. MCLENNAN: I was just going to make one
5 comment in our neck of the wood's transmission planning.
6 One of the issues will be what happens with the development
7 of oil and gas, I referred to it earlier on the west side of
8 the state. So if you think about how if we were being in,
9 people not traveling, people staying home, that demand
10 coming back on the electric side, or we just don't use
11 transportation fuels, what happens?

12 And you know, they did a really good job of the
13 facility in -- , they are not necessarily moving in the same
14 direction as it relates to their vision of what the future
15 of electricity looks like. They're trying to protect the
16 resources within its borders. Minnesota is trying to figure
17 out how do we have resources that have different
18 characteristics.

19 So I think I mentioned planning as Clair
20 described very well, is going to be one of the challenges of
21 creating what these states do and more locally for us is
22 going to be what happens to oil and gas development in our
23 region.

24 CHAIRMAN CHATTERJEE: Thank you for that Mac,
25 good to see you. Building on some of the differences across

1 state lines, Chairman Randazzo, you've been highly involved
2 with these issues both as a state regulator and through
3 NERUC, and I really appreciate you being here to give the
4 state perspective. What have your experiences been
5 regarding changes on the system due to COVID-19?

6 As a state regulator, what are the things that
7 you and your colleagues have been thinking about most during
8 these times?

9 CHAIRMAN RANDAZZO: Chairman Chatterjee, thank
10 you for the question and also the opportunity to visit with
11 you today. The global observation that I would make is that
12 we're not dealing with an energy infrastructure problem.
13 We're dealing with a public health problem.

14 And there are implications that public health
15 problem that we're dealing with emergency that we're dealing
16 with has implications across every sector, including network
17 industries that we regulate here in Ohio, and you all
18 regulate at the federal level.

19 So the challenges are at the moment, what can we
20 do to contribute to solving the public health emergency and
21 trying to provide enough flexibility to the -- I'll call
22 them first responders in this case, to contribute positively
23 to that goal? As I indicated in my prepared statement from
24 a planning perspective, the pandemic scenario is really a
25 people problem.

1 You've got to have enough people. You've got to
2 take care of your people, human resources that you need,
3 because the virus affects human resources. So if you could
4 tell me the scenario -- the public health scenario that
5 we'll be dealing with tomorrow, we could probably then plan
6 from an infrastructure perspective and resource perspective,
7 what we can do to contribute to a positive resolution to a
8 public health emergency.

9 So that's the context I think that we've all been
10 struggling with and the priority that we've been thinking
11 about as we try to think through our more typical regulatory
12 responsibilities and I just want to say that across the
13 range of natural gas, electric, water, sewer, communication
14 industries, we've had great cooperation, both with regard to
15 those sectors that we do regulate.

16 And in Ohio we don't regulate the co-ops or the
17 municipal utilities, but we've had I think an open
18 conversation and cooperation across all of those various
19 types of business models and also just on what we can do to
20 help provide a positive resolution to the public health
21 emergency. I hope that's responsive.

22 CHAIRMAN CHATTERJEE: That's great. Thank you.
23 For my next question I think I'm going to turn to Curt
24 Morgan and then have Mac weigh in as well. Which types of
25 resources are being affected by the COVID-19 emergency and

1 how? And what are you -- what are the expected impacts from
2 the situation on the different types of resources including
3 coal, natural gas, nuclear, renewables, storage, and the
4 like?

5 MR. MORGAN: Yeah, so I think Mr. Chairman,
6 thanks for the question by the way. I'm glad you're back
7 on. So I think the biggest effect right now is probably the
8 near-term gas price affect, which is really odd right now,
9 gas is below \$2.00 and that was happening frankly before
10 COVID.

11 But and that affect, that over-supply of natural
12 gas, has continued to linger in 2020. Now Paul mentioned --
13 Paul Segal mentioned that we -- and I agree with him, that
14 we probably are going to see gas go up into the \$2.50 to
15 \$3.00 range with potential to go up to \$3.00 to \$3.50 you
16 know, depending on what kind of winter and weather we get.
17 But that's you know, that's more later in '21 into '22,
18 there's a potential for that.

19 But that, you know, that directly affects coal
20 power plants and gas plants that have largely replaced coal,
21 we have several of our coal plants that were essentially off
22 on economics and so I think they've been most directly
23 affected by where we are right now.

24 Of course demand affects all. Lower demand
25 affects all resources and the market unit is a lower cost to

1 unit right now, so that means that prices are lower. You'll
2 see forward prices come down, you know, and it really
3 varies, frankly, by market. Because you know, for example
4 in ERCOT, where we have a big business, you know we haven't
5 seen quite a precipitous reduction in demand and it's come
6 back quite a bit and then it's very uneven in the other
7 markets, but that also is a factor.

8 We've also seen, and I don't think this is
9 necessarily heavily COVID related, but we have seen a little
10 bit of a drawback on renewables development, some of which
11 is you know, tax incentive related. I think it's mainly
12 demand related and forward curve related. So you know, I
13 think there's a variety of reasons why that's the case, but
14 capital market's driven.

15 You know the capital markets have pulled back
16 some in terms of supporting renewables and also I think
17 sponsors, sponsor-supported renewables, you know, big
18 companies that are building out their renewables are tending
19 to now wanting to do a little bit closer to their active
20 facilities rather as a process and you're doing something in
21 West Texas that offsets something in Virginia.

22 So I think it goes to the main impact we see but
23 all resources have been impacted and you can just see it in
24 where all the curves are, prices are lower. And this is
25 why, you know, I said in my opening remarks as a company you

1 have to drive to a low-cost position, and you have to
2 continually put yourself in a position with low debt. You
3 have to be willing to -- or you have to be able to survive
4 this type of a downturn and actually put yourself in a
5 position to thrive.

6 CHAIRMAN CHATTERJEE: Mr. Morgan thank you, Mac?

7 MR. MCLENNAN: I would add to that. I think all
8 resources right now are being impacted. Part of it is from
9 the demand portion of it. I think it's not necessarily
10 COVID related. I think a little bit as well is that you
11 have what I call kind of going into COVID you have what I'll
12 refer to as market distortion and whether that's gas prices,
13 or the continued addition of intermittent resources and it's
14 a mix, it doesn't necessarily reflect, particularly if
15 you're in the upper Midwest, you think about very difficult
16 30 degree below weather days and so I think we have a little
17 bit of what I refer to market distortion.

18 I think COVID just adds to that. It just adds,
19 the demand for it goes down, resources change, puts more
20 pressure on your lessor performing assets which creates a
21 bit of a down spiral as it relates to them and yet you can't
22 really take them offline. When we get back to 100 degrees,
23 so if you look outside today here, the wind isn't really
24 blowing and for a company like us who has 35 or 40 percent
25 of our portfolio in intermittent resources, the other ones

1 have to work when those don't.

2 And so it gets fundamentally -- COVID I think is
3 just adding to a very relatively confusing marketplace as it
4 relates to how do those assets perform. Certainly in our
5 neck of the woods in North Dakota, coal is the dominant
6 resource. We have some very small gas assets in the state,
7 but that's it and so coal at least where we live, is
8 probably the most impacted right now by not necessarily
9 COVID, but market panic that I think COVID is adding to.

10 MR. MORGAN: Mr. Chairman, can I mention one
11 other thing please?

12 CHAIRMAN CHATTERJEE: Yes sir.

13 MR. MORGAN: If you don't mind. You know I will
14 say that from a gas transportation standpoint, you know, a
15 gas infrastructure standpoint, you know, they've done a
16 phenomenal job. The rails have done a phenomenal job. You
17 know, we're building a very large battery installation in
18 California. We have some trouble with COVID on the front
19 end.

20 Our contractor was, you know, just having trouble
21 putting in the right procedures to get enough people on the
22 site. You know, that slowed us down a little bit, but you
23 know, we have seen some. This is more specific issues to
24 your question. We've seen some specific issues. We had one
25 instance where you know, we had a COVID related affect on

1 one of our outages at the Kincaid Plant, it's a coal plant
2 in Illinois.

3 You know that pushed us into June. That outage
4 should have been done you know, end of May. We're now back
5 up and running at that power plant, but you know, so we've
6 seen some affects from COVID specifically at sites, but
7 generally speaking, the infrastructure -- the energy
8 infrastructure has performed pretty well, you know,
9 throughout all this.

10 So the effects on these resources really haven't
11 been due to any infrastructure issues, they've been more
12 economically driven by demand and capital markets.

13 CHAIRMAN CHATTERJEE: Thank you for that Curt and
14 Mac as well. To build on that a little bit for my next
15 question, I think I'll direct it to Clair, but anyone else
16 feel free to jump in. And Curt may have answered this to
17 some extent, but I guess Clair, do you believe the previous
18 forecast about changes to the resource mix changed as a
19 result of COVID?

20 And if so, over what time period and what could
21 some of those changes be? And how rapidly are they expected
22 to occur? And how could they potentially impact reserve
23 margins and transmission planning?

24 MR. MOELLER: So I'll try to unpack that. That's
25 an important series of questions that we spent a lot of time

1 thinking about. Dominant members in the MISO market have
2 not indicated that there are any changes to their goals with
3 fleet transitions. We had a conference call with Edison
4 Electric Institute's CEO a couple of weeks ago.

5 And they're all still pursuing their plans as
6 they have laid them out. Most of those plans included
7 significant amounts of conservation to keep demand openly
8 flat and transitions from coal to gas and renewables
9 predominantly. We have seen no indications that appetite
10 for change is diminished, so at this point we're about to
11 launch a long-term planning initiative to try to assimilate
12 all those different plans and look for the lower depths
13 transmission that allows us to meet those.

14 Importantly, resource adequacy and reserve
15 margins is significantly complicated by the change in the
16 fleet to a fleet that is no longer homogeneous. When
17 reserve margins were invented so that they could discern how
18 much capacity you needed, virtually every utility in the
19 country had the same kind of characteristics in their
20 generation fleet.

21 And if you could cover your demand on what you
22 anticipated as your peak day the rest of the year was kind
23 of easy. That has not been the case in the MISO marketplace
24 across the last four years. Across the last four years
25 capacity shortfalls have occurred in winter and shoulder

1 months, driven largely by first outages on top of
2 maintenance outages on proper unseasonable weather.

3 So the notion of reserve margins is being the
4 dominant indicator of whether or not there is sufficiency.
5 We believe it needs to be questioned and we need to find a
6 way to take care of every day of the year, not just the peak
7 day of the year. You will see us approaching the FERC
8 across the next 12 to 24 months with ideas on how to adjust
9 that so that we can maintain a safe reserve margin, so we
10 can ensure that the lights stay on every day, not just in
11 three days in the summertime.

12 But the increase in intermittent resources have
13 the effect of making us need to look at all 87 60 hours, not
14 just at peak season, but it is a very difficult problem --
15 the statistical analysis around peak is actually kind of
16 easy compared to the work we're going to need to be able to
17 do to cover the rest of the year.

18 CHAIRMAN CHATTERJEE: Thank you for that. I want
19 to pivot a little bit to my next question to Paul. Paul,
20 how could the COVID-19 emergency potentially impact
21 competitive transmission development under the Order-1000
22 transmission planning process?

23 MR. SEGAL: That's a great question. There's
24 again, a lot that we don't know yet about how people will
25 plan for the -- how we will be planning for the future as we

1 move forward. Sorry, there we go can you see me? Okay.
2 Sorry about that. So I think that when we look at this
3 event and how it might impact the future, I think we need to
4 think in a pretty big picture way. This is an industry
5 often-times when we're building the assets, the expectation
6 is that they will survive for 40 plus years and then
7 provide valuable, hopefully services, for an extended period
8 of time.

9 It's more important now than ever that we think
10 about planning the grid of the future, that we think about
11 making the investments where they need to be made so that we
12 can incorporate the resources that we'll have 5, 10, 20
13 years in the future rather than you know, purely solving for
14 the resources that we have today.

15 And I think about COVID and in my mind early on
16 in this event, when we were as a collective stay at home,
17 making massive sacrifices of our economy and our happiness
18 for the collective good, and frankly from the biggest health
19 impacts were a relatively small portion of our population.

20 That kind of effort -- aggregate and joint
21 effort, I think may prove to be a demonstration of the
22 ability of a community of a country and ultimately the world
23 to step forward and solve big problems like climate change.
24 So we may well see that this event needs people to focus
25 even more than they have been around solving the big

1 potentially disruptive changes that are coming at us in the
2 future and it shows that we are capable of having a
3 collective impact.

4 But we need to double our effort to really think
5 about planning for the future in the immediate term. We
6 clearly have a damaged economy. We need to be very focused
7 on costs. Ultimately, you know, we are in the business as
8 an independent company looking to create opportunities and
9 we can only create opportunities if we're offering a value
10 proposition. We need to be able to save customers money.

11 We need to be able to transfer risk from those
12 customers to private companies like ours. I'm hopeful that
13 with ongoing guidance from policymakers, that the RTOs and
14 the utilities will move in that direction. But again, I
15 think it's very early in terms of understanding what the
16 responsibility fact is.

17 CHAIRMAN CHATTERJEE: On that Paul, do you think
18 the Commission's transmission planning regulations
19 incorporate sufficient flexibility for a utility to adapt to
20 these unanticipated changes in electricity demand
21 potentially caused by COVID?

22 MR. SEGAL: I would imagine that they do. I
23 think that in many ways this is a question of desire and
24 it's a question of incentives. There is a nobel volume
25 incentive for many investor owned utilities that receive a

1 rate of return on equity to invest capital and I think that
2 there needs to be a counter party or a counter measure,
3 countable to that position whether it's the FERC or the
4 state Commissions thinking about the ultimate customer and
5 making sure that the right investments get made.

6 CHAIRMAN CHATTERJEE: Thank you. For my next
7 question I'm going to turn to Mr. Fisher, Travis, I really
8 appreciate you being here to represent large industrial
9 consumers. From a consumer perspective, what lessons should
10 energy industry and regulators take away from this COVID-19
11 experience thus far?

12 MR. FISHER: Thank you. I think probably the
13 biggest thing to takeaway is at least for ELCON members, how
14 resilient we've been both on, so we are industrial consumers
15 of electricity, but we're manufacturers of a wide variety of
16 producers. It's very important that we take these kinds of
17 thing in stride and I think our companies have done a good
18 job of doing that.

19 I think some of the other points we
20 made earlier, I think an interesting thing -- a dynamic that
21 I'm seeing unfold is our companies are taking cuts and
22 taking rate downs where needed and I think there's a pretty
23 stark contrast between all of the companies that work
24 outside of the utility space and are having to economize and
25 change what they're doing as opposed to -- it was just noted

1 the EI company sent the -- they're basically taking their
2 plans and the same.

3 I'm a little bit concerned about that because the
4 costs of the transition that folks are undertaking, they're
5 ultimately going to fall on consumers like ELCON members. I
6 think that's an important thing to note is that you know, as
7 the pace of condition keeps pushing forward, let's keep
8 costs in mind.

9 CHAIRMAN CHATTERJEE: Thank you for that Travis.
10 I don't know if it's the first time you'd worn a -- since
11 you got your new job, but you still have your FERC pin on
12 there.

13 MR. FISHER: Indeed it is. I don't wear a jacket
14 unless I have to. I've still got the FERC pin that you gave
15 me, so thank you for that.

16 CHAIRMAN CHATTERJEE: Thanks for participating
17 today. Next I want to pivot to Gil. As a public power
18 entity operating in a state that was really hit hard, can
19 you just give us a sense of what your key takeaways were and
20 what advice you might have for others?

21 MR. QUINIONES: Thank you Mr. Chairman. You
22 know, we were, and we are you know, the first area that got
23 hit by COVID. The one thing that I would advise other areas
24 is that in New York we really collaborated right from the
25 beginning. So, the New York ISO, the state, NIFA, our

1 Department of Public Service, the generators, the utilities,
2 we had calls every week to make sure that we have common
3 situational awareness, we can share resources, whether it's
4 spare parts, or -- we could share operators.

5 We were afraid at the beginning of this event
6 that there would be a very high infection rate and that can
7 impact power plant control room operators and control center
8 -- transmission control center operators. So a quick
9 collaboration, having the agreements in place -- the
10 agreements are amongst the key stakeholders is very, very
11 important.

12 And then it's always about protecting the health
13 and safety of your employees, that's number one. And
14 keeping the lights on no matter what. And we were focused
15 on that in New York in a collaborative way. We were lucky
16 and fortunate that our state ramped up testing and we have
17 the most amount of testing per capita anywhere, and that
18 helped a lot because if we can isolate positives, we can
19 have that tracing and we can quarantine people that needed
20 to be quarantined.

21 So those are the elements for us. We were able
22 to get through that mountain and back on the other end, and
23 we're doing our very best collectively to keep the infection
24 rate low and to minimize the impacts of our operations.

25 CHAIRMAN CHATTERJEE: Thank you. For a

1 difference perspective, Mr. Bird, are there any key points
2 that you want to emphasize about how COVID has impacted the
3 West?

4 MR. BIRD: Yes. Thank you Chairman Chatterjee.
5 I appreciate the opportunity to respond. You know, COVID,
6 as I mentioned earlier for us have not had a material impact
7 on our ability to deliver our core mission as reliability,
8 affordability and safe service and electricity while we
9 continue to radically change our portfolio.

10 And maybe just responding to a couple of comments
11 I've heard, you know, positively absolutely imperative for
12 us as a provider to 2 million customers across the west and
13 I'm very proud that we've kept our customer at the
14 forefront. For us, we've kept rates lower than they were
15 many years ago by virtue of how we approach our investments
16 and operator system.

17 One of those opportunities, frankly, is then to
18 take advantage of the system we operate that covers 10
19 states, referring back to kind of the rule here about what's
20 the most expensive route to serve customers. I would argue
21 the most expensive route would be to isolate yourself on an
22 island and limit your options.

23 And thankfully, in the West we've got this
24 tremendous abundance of low-cost resources, but they are
25 very diverse across the West, you actually think about the

1 hydro up in the Northwest as well as great wind resources.
2 You think of Wyoming and literally everything under the sun
3 there from the best wind resources in the West to the
4 low-cost coal and natural gas, to the Southwest where we
5 have dramatic solar.

6 If you tried to serve each one of those regions
7 with just not one resource, you'd end up with the most
8 expensive system. If you put them all together, we can
9 realize dramatic savings as well as improve reliability, you
10 know, think of the EIM, you know, 920 million dollars in
11 savings over the last 5 years since we put that in place.

12 Literally just because we're better using systems
13 to more efficient markets and we didn't have to invest a
14 dime into that infrastructure, but none of those savings
15 would be possible without the network of that physical
16 asset. You know, I think of things like the rupture of a
17 pipeline in Canada that occurred last year and how we had to
18 swing resources again from a very large region across the
19 West to keep the lights on, did that successfully, but all
20 that really hinged on this tremendous advantage we have in
21 the West of that great robust transmission network.

22 And so opportunities to expand on that has really
23 never been greater. We're able to now invest not only new
24 renewable resources, but new transmission that all in is
25 lower cost than buying energy off the market. I mean it's

1 unprecedented. So our buildup we're putting in place this
2 year with our Gateway Loss Project and about 1,500 megawatts
3 of new renewables at lower cost than any that we can procure
4 off the market.

5 You know, we're looking to double that -- more
6 than double it with our next situation. You know I could go
7 on, but I mentioned to demand response since we used the
8 technology we can isolate -- not isolate, but automate air
9 conditioning systems with almost invisible impact to our
10 customers, but we monetize that by providing frequent
11 response across our entire balancing authority area across
12 10 states, which again leverages that transmission grid.

13 So I couldn't be more optimistic about the future
14 and our opportunity to really lead the world by investing in
15 infrastructure that I think in transmission is close to no
16 regrets situation, but requires a -- you know, careful
17 knowledge and reasonable planning effort to bring multiple
18 companies together to leverage it.

19 There's a lot that that PacificCorp can do
20 uniquely because we have such a large system, but in the
21 same way that we've inducted in the EIM and partnered with
22 others, we can even lower our costs by expanding that even
23 further, thank you.

24 CHAIRMAN CHATTERJEE: Thank you. I will ask just
25 one final question and I'll turn it over to my colleagues

1 and staff. My last question is going to be for Mac
2 McLennan. Mac, as a co-op, how have changes in demand
3 impacted your resources in your planning efforts? And at
4 the conclusion of your answer, Commissioner Glick, please
5 take over.

6 MR. MCLENNAN: Thank you Chairman. So for us
7 individually, changes in demand really haven't been
8 dramatic. I said that in our opening comment. If you look
9 at where we're located generically, most of the business has
10 been continuing to run, must run business for the most part.

11 You know the difference though, I'll just say
12 collectively across the cooperative model as we see demand
13 goes down, as you're aware there's only one bucket that's
14 collected from it, the consumer side of it. So there is
15 some concern across the cooperative sector that relates to
16 whether or not we're going to see rates go up as a result of
17 demand.

18 And so I think everyone in the cooperative sector
19 is trying to look at what's the length of run that we're
20 talking about with respect to COVID? So are we talking
21 about a six month event, or are each of us beginning to
22 prepare for demand that's impacted for months beyond that or
23 for years beyond that.

24 So if you look back to 2007, obviously during the
25 Great Recession you saw a significant drop of demand. We're

1 all still, I think, even a decade later trying to
2 fundamentally manage that. So one of the really I think,
3 big questions for us, as it relates to COVID and demand, is
4 are we going to see demand come back in the next 6 to 12
5 months, or are we going to have a permanent destruction of
6 demand in some of these areas.

7 I refer to my nice neighbors to the West earlier,
8 as a much better example is they were serving little gas
9 fields they had you know, 500 to 2800 megawatts in the queue
10 for development and that has significantly fallen off as oil
11 and gas now tries to regain its brass.

12 And so across the spectrum I think for
13 cooperatives is fundamentally different based on where
14 you're located. For us, generically, we've seen our demand
15 shift. Our bigger concern individually because we are
16 heavily winter peakers, is whether or not profile changes
17 for individuals -- we're also heavily residential.

18 So right now we see our load profile changing and
19 does that substantially change and will that then impact?
20 How do we utilize our resources? How do we go back into
21 winter? So for us right now, demand as a result of COVID
22 specifically, has really been relatively unaffected. We are
23 primarily much more affected by what happens to weather.

24 It's the duration of the impact to COVID that I
25 think we are concerned about and what that will hopefully

1 translate into consumers for consumers.

2 CHAIRMAN CHATTERJEE: Thanks Mac.

3 COMMISSIONER GLICK: So I'll start off now and
4 maybe just ask a question first of Mr. Bird. You had
5 mentioned Mr. Bird, that you know, in your opening statement
6 you were talking about how PacifiCorp has been the last to
7 get ready for fire season which is obviously becoming an
8 increasing threat to the West.

9 I'm just curious how the pandemic has impacted
10 your ability. What have you done given that the pandemic is
11 here now in terms of making sure that you are still ready
12 for the fire season?

13 MR. BIRD: Yeah, thank you Commissioner Glick.
14 It's Stefan Bird, PacifiCorp. There's really no impacts or
15 efforts to really dramatically increase our resilience and
16 heartening efforts, seeing anything from increased
17 vegetation management, and you know creating bigger -- ,
18 particularly in fire high-risk areas where a lot of work has
19 been done in the last many years to identify those areas and
20 address those areas specifically.

21 You know, it's a multi-state effort for us and
22 particularly California, Oregon and Utah where most of that
23 exposure exists in our system and a lot of cooperatives and
24 collaborative efforts with the agencies, both our
25 Commissions as well as with the fire response, first

1 responders, as well as the county emergency managers,
2 everything is stepped up across all of those fronts and I
3 couldn't be more pleased with the cooperative efforts.

4 Also at the federal level, with the industry as a
5 whole, we're partnered with a new ESEC electricity subsector
6 coordinating council on the success of that collaboration
7 with the federal agencies on cyber security. A very similar
8 effort has been undertaken starting in January, working with
9 the Department of Energy and other federal agencies,
10 particularly the BOM, DOI and USDA Forest Service to both
11 streamline our access to you know, getting on those public
12 lands and address issues as well as with the DOE and working
13 with the National Labs, a good modernization laboratory
14 consortium which has tremendous capabilities both in AI and
15 other, even military grade capabilities they've developed
16 how we can leverage some of that capability to further our
17 situational awareness and this mitigation on wildfire.

18 So a number of fronts really moving forward full
19 steam ahead and in front line standpoint we've insured that
20 our folks are working in safe conditions and able to respond
21 across the board. COVID has certainly impacted the current
22 situation in terms of the stress that already exists and
23 those local, particularly rural communities.

24 So making sure that we've got care centers
25 available to go if there is, you know, God forbid a

1 wildfire, we're able to support that effort and again
2 coordinate very closely with them. Thank you for the
3 question.

4 COMMISSIONER GLICK: Thank you. So Mr. Fisher, a
5 question for you. you had mentioned in your statement and
6 we just referred to it again, a concern that some utilities
7 may seek to recover the costs associated with reduced load.
8 As you pointed out your members, and I'm mean its' less
9 people are buying cars, Ford isn't going to be able to sell,
10 we're just going to charge everybody else a lot more to
11 recover our losses.

12 So I was curious whether you thought -- maybe you
13 can elaborate on this point a little bit more, but also
14 whether you thought there was anything that FERC and the
15 state regulators could do to ensure that utilities don't
16 essentially try to subsidize their losses related to reduced
17 load from their captive customers.

18 MR. FISHER: So that's a very good question and
19 thank you. I think the key thing is you know, when we talk
20 about just and reasonable rates -- an issue that ELCON has
21 taken up over the years and first I guess if there are
22 differences among customer classes, so we're seeing some
23 uptick in residential consumption with a downtick on the
24 industrial side.

25 So first, to be sure that there's no cross

1 subsidization or sort of cost-shifting among customer
2 classes, I think that's very important. Where that might
3 come in is to the extent that utilities seek to recover
4 their fixed costs volumetrically and there are some programs
5 that you know, you look very carefully at waivers that ask
6 to either change the filed rate, or seek a waiver of a
7 portion of it.

8 You know it's unfortunate there's a downturn in
9 demand, right, I think it would be even more unfortunate for
10 some customer classes to essentially bear more
11 responsibility in order to make the utility whole. So
12 there's a balancing act there and I think, you know, a large
13 part of it can be controlled just by sticking to the filed
14 rates. And I think that's probably the case at the state
15 level as well.

16 I'll note that I included the State of Indiana in
17 my remarks. As I understand that the Indiana Commission,
18 actually rejected a filing for a utility to seek some
19 recovery of some portion of fixed costs that it felt weren't
20 going to be able to be recovered given the COVID as well.

21 So that's a great example of a state stepping up
22 and doing the right thing on the part of the consumer. I'm
23 not entirely sure where that 6 percent is from a FERC filing
24 payment. I haven't seen a bunch that sort of fit that bill.
25 But I expect to see them coming, so that's just the kind of

1 thing that, you know, I'd like to be -- I'd like for that to
2 be on FERC's radar.

3 MS. RODER: Commissioner Glick. I note that
4 Chairman Randazzo has his hand raised. Should we go to him
5 next please? Go ahead Chairman.

6 CHAIRMAN RANDAZZO: Thank you. With regard to
7 the question, for states like Ohio where we have retail
8 access, FERC has assumed exclusive jurisdiction over
9 transmission functionality. And at least in our case, and I
10 think this is true in quite a bit of cases that the
11 compensation for the transmission owners occurs through a
12 formula rate. So if there is a formal offering demand, all
13 of the things being equal, you get an increase in prices to
14 that formula rate, and if there are extra costs that get
15 loaded in that get passed along, plus whatever return is
16 included in that formula.

17 So the focus on COVID-19 related costs, I think
18 is part of the focus of this panel, but generally speaking,
19 whatever the costs are they're going to get picked-up by
20 customers through the formula rate process. So if FERC has
21 some concerns about the scope of costs, and how they get
22 recovered, I offered some suggestions in my prepared
23 statement dealing with giving customers more options so
24 that they can better serve their predictability and price
25 objectives.

1 But right now as this thing stands, there's very
2 little with the state regulator, at least in our case, can
3 do with regard to what happens as a consequence of
4 transmission service. And in our case, the generation's buy
5 price is dictated by market forces.

6 MS. RODER: Thank you Chairman Randazzo.
7 Commissioner Glick, back to you. I don't see any other
8 raised hands.

9 COMMISSIONER GLICK: Okay, thank you. And just
10 one last question. Mr. Segal earlier mentioned that because
11 more people are working from home, that energy efficiency --
12 we're having lots of energy efficiency and the customer is
13 being impacted adversely.

14 And we had this discussion a little bit with the
15 first panel this morning. But I just want to know for the
16 rest of the folks here on the panel if you could talk about
17 how you see energy efficiency being impacted due to again,
18 more people working from home, less people going into the
19 office, at least currently and what you think the Commission
20 or state regulators should do to the extent there is
21 anything that can be done?

22 MS. RODER: And we encourage folks to raise their
23 hands. I will first call on Curt Morgan. Please go ahead
24 Mr. Morgan.

25 MR. MORGAN: Okay. Commissioner Glick, so in

1 number one I will say though that the overall demand is down
2 and so you know, just thinking about admissions in
3 efficiency, this is not the way to get there. But you know,
4 there is a certain efficiency in the fact that we're
5 usually, you know, less electricity than we were
6 previously.

7 Now the reason for it is not good at all. All I
8 can give you is that we're a big retail provider and it's a
9 big issue for us because we're trying to obviously help our
10 customers get through this and you know, it's good business
11 in my opinion, but it's the right thing to do to help people
12 through this.

13 And so what we've been trying to do is give them
14 tools and also we have a number of different rate structures
15 and time of use products that we can help them with to try
16 to get them through a tough period of time. We also have
17 something that the company itself put in place in the
18 competitive retail markets from TXU Energy Aid, which is
19 funded by the employees of the company and the company and
20 other donations.

21 That's really United Way network, but that gets
22 money into the hands of people that need to be able to pay.
23 But the bottom line is I think there's a responsibility in
24 my opinion for retail workers, especially providers in
25 competitive markets and utilities and others to help find

1 ways for residences to save during this period of time and
2 define products that might suit their needs.

3 And then if they can't make it through this
4 period of time, to try to help them financially through it
5 and so they can get back on their feet because we all know
6 this is a short-term, or at least we hope is a short-term
7 phenomenon and it's incredibly important that we bridge that
8 gap.

9 You know, I do think that it's not difficult in
10 some instances for people to invest in energy efficiency
11 where there's a front end cost and you know, we can also do
12 things on that where, you know, we can -- companies can fund
13 the upfront costs and then pay it over -- you know, in a
14 bill, for such as you know, solar, or other types of energy
15 efficiency, retrofits.

16 But we have a responsibility in my opinion during
17 something like this to try to help people at their home find
18 a way to save and get them to the other side.

19 MS. RODER: Thank you very much Mr. Morgan.
20 We'll now call on Gil Quiniones. Mr. Quiniones, just go
21 ahead.

22 MR. QUINIONES: Yes. Thank you very much.
23 Commissioner, I think energy efficiency is extremely,
24 extremely important in many aspects. First, as Curt said,
25 it saves money in the utility bills of our consumers and

1 businesses and makes our businesses a little more
2 competitive.

3 Our energy efficiency also is the biggest job
4 creator in all of the clean energy sectors. So it's been
5 hit very hard because of this COVID pandemic and if done
6 right, it can also help our buildings and homes being more
7 flexible and really take advantage of that demand
8 flexibility in transforming our grid from the current system
9 to a smart integrated and cleaner grid.

10 And as we do more and more electrification, we
11 must do energy efficiency. Otherwise, the investment and
12 reinforcements of the grid will be too expensive. It will
13 also help overall in increasing system efficiency and
14 optimizing the capacity utilization of our grid if you do
15 energy efficiency.

16 If I can just comment on a couple of issues that
17 were mentioned and questions asked before, in terms of
18 transmission planning and what are the changes in demand and
19 COVID, and how it was impacted.

20 I think the short-term preservations, because of
21 COVID is not really the primary driver that will impact
22 transmission planning. One issue that is scaring all of us
23 right now and really it started even back in 2012, that if
24 you look at the zip codes of the people impacted by COVID,
25 and if I extrapolate back to 2012 in our case, Super Storm

1 Sandy, extreme weather event. It's people who are already
2 overburdened environmentally, and mostly communities of
3 color.

4 And I think that FERC, state regulators, all of
5 us must take into account those facts when we start doing
6 transmission planning going forward. I think it's something
7 that you know, we just cannot ignore any longer and not take
8 into account in the buildout of our transmission system.
9 Thank you very much.

10 MS. RODER: Thank you very much. I also see that
11 Chairman Randazzo's hand is raised. Please go ahead.

12 CHAIRMAN RANDAZZO: Thank you. I just wanted to
13 mention with regard to the differential impact of the
14 pandemic, I'll relate an anecdotal experience we're
15 having. We have a lot of folks working from home. Some of
16 them have indicated to us in surveys that we've been doing
17 to try and evaluate that which has been working very well
18 and good productivity and all that stuff.

19 But one of the things we've learned a lot of
20 ways, people are willing to make investments in home office
21 equipment. For example, if they had a better understanding
22 of how long you're going to be working from home. So I
23 think that the question about energy efficiency again comes
24 back to some practical observations if you tell people what
25 the expectations are in terms of how long they may be

1 working at home, they may have a different valuation on
2 energy efficiency because of the impact on their energy
3 utilization.

4 And until we can solve those kinds of questions I
5 think it's hard to answer in the abstract what we should do
6 to encourage energy efficiency around a pandemic scenario.
7 I think all of us are doing what we can to try and make room
8 in the marketplace for energy efficiency where it makes
9 sense.

10 But broadly speaking, I don't see a differential
11 impact at this point as a consequence of a pandemic.

12 MS. RODER: Thank you very much. Commissioner
13 Glick, I don't see any other raised hands, but I will remind
14 folks who have already spoken to put their hand down. Thank
15 you. Over to you Commissioner Glick.

16 COMMISSIONER GLICK: Thank Aileen, I actually
17 don't have any more questions. I'll turn it over to
18 Commissioner McNamee.

19 COMMISSIONER MCNAMEE: Thank you Commissioner
20 Glick, and thank you to the panelists. I really appreciate
21 it. It's been a very informative panel and that's one of
22 the things I've enjoyed being a Commissioner is getting to
23 participate in activities like this because it is so
24 educational.

25 I want to focus on something that's really not

1 directly a FERC jurisdictional issue, but it's something
2 that touches on us but also on a number of you and the
3 services you're providing -- that you're also providing
4 distribution service. And it's really kind of a short-term
5 question and that is, you know, when COVID hit, you know, it
6 was really kind of in what's traditionally being considered
7 the shoulder months.

8 And now we're getting into the summer. Many of
9 the utilities have summer peak units as some of you have
10 mentioned. And I'm wondering with so many people being at
11 home, air-conditioners are going to start going on. You've
12 got, you know, two parents working in the house and they're
13 both running their computers or their printers.

14 You've got you know, may have children who are
15 playing on the X-Box or actually you really have a lot of
16 loads going on. And is the distribution system capable --
17 and I know it's a broad question, but I'm just asking are
18 people thinking about this, is the distribution system ready
19 to be able to handle all of this load and is the
20 transmission to get there in the sub-stations the right
21 place to be able to get the energy that's out there and get
22 it to the suburbs, the places where the people are so that
23 then they can continue to operator?

24 Or is this something that we should -- that we
25 really don't need to worry about and the system's just fine,

1 and it's really not an issue?

2 MS. RODER: Thank you very much. At this point I
3 see that Mr. Quiniones has his hand raised. Please go
4 ahead. And Mr. Quiniones, I'll just remind you to unmute
5 your microphone, thank you.

6 MR. QUINIONES: I've got it. Sorry about that.
7 Thank you Commissioner for that question. The New York
8 Power Authority, you know, we do not own distribution, but
9 we work very closely with the investor-owned utilities and
10 the Long Island Power Authority here in New York.

11 Your observation is very interesting because
12 what's happening is that the peak during the day is actually
13 moving -- moving forward. So that's one function that is
14 happening. And you're correct to say that if people are
15 working from home, that there is an increase in residential
16 load and a decrease on the commercial.

17 This is districts of New York. So it's something
18 that we need to watch out for. My -- at least my
19 conversations with my partners and colleagues here in New
20 York City and other parts of New York State, they have been
21 investing at a distribution level, both as a distribution
22 feeder and the substation in the transmission that supply
23 those feeders, but it is going to be interesting if we have
24 a sustained heatwave and what will be the performance of
25 those feeders in residential neighborhoods going forward,

1 that's something to see.

2 So it's a very, very astute observation on your
3 part. Thank you.

4 MS. RODER: Thank you very much. Next up we have
5 Mr. McLennan. Please go ahead sir.

6 MR. MCLENNAN: Thank you. I was just going to
7 make one anecdotal observation that so in our juris
8 territory, the lakes region of Minnesota, we did see
9 actually during the holiday some challenges to parts of our
10 member's distribution system from primarily around the idea
11 that historically you would see people spreading out for
12 vacation over the Fourth, but they were so concentrated at
13 the lakes that we saw abnormally high demand or usage, and
14 frankly in a few sports and some concerns over whether the
15 system would remain intact.

16 And so that really not so much given our daily
17 load patterns, as much as how we change the human kind of
18 relationship as it relates to where they're going. So, you
19 know, historically we have a lot of people going to the lake
20 over the Fourth, but because no one travelled, that number
21 was substantially higher.

22 So you know, I think I said this in some of my
23 other statements. One of the things that we're trying to
24 get our arms around is -- is COVID going to change not only
25 daily patterns, but industry patterns with respect to the

1 ability for business for example, who are delivering to
2 industries which are shut down. So we've seen some cyclical
3 industries as well that historically wouldn't have happened.

4 We've also seen some others who picked up
5 dramatically. And so I think your point is valid -- is the
6 pandemic going to change behavioral patterns in a way that
7 the system was originally designed around and just
8 anecdotally in the last few days, we didn't, you know, I
9 don't want to give individuals going to the lakes or
10 whatever the number was, certainly put pressure on.

11 MS. RODER: Thank you Mr. McLennan. And I will
12 call on Chairman Randazzo, please go ahead sir.

13 CHAIRMAN RANDAZZO: Yes, thank you. I think the
14 thing that has been occurring for some time is there's a
15 rather large investment in distribution systems, upgrading
16 the systems, building in newer technology that's unrelated
17 to of course the pandemic. We will gain knowledge from the
18 pandemic, typically with distribution systems.

19 As you get closer to customers, systems are
20 designed to serve the non-coincident peak of a localized
21 area. So some load shifting, both with in terms of
22 magnitude of peaks and the load duration curve can affect
23 the ability of systems to sustain supply. But generally
24 speaking, we've had very good experience with the system's
25 ability to keep the lights on, and we're talking about

1 distribution serving residential areas or non-residential
2 areas.

3 And part of that is into the significant efforts
4 that are being made by the operators to pay attention to
5 what is going on and make adjustments as needed.

6 MS. RODER: Thank you very much. I see that
7 Stefan Bird has his hand raised. Please go ahead Mr. Bird.

8 MR. BIRD: Yeah, thank you Commissioner McNamee.
9 I would comment from PacifiCorp in regard to COVID impacts
10 we've seen, you know, like a lot of utilities, increases in
11 residential through reduction of the C and I side,
12 commercial and industrial, but I would comment the most
13 dramatic impact that I would foresee over the next 10 years
14 through our distribution network, we've got about 63,000
15 miles of distribution lines, is the demand by certain cities
16 and some of the commercial customers within those cities who
17 are demanding 100 percent renewable energy.

18 And that stands anywhere from a city like
19 Portland to Salt Lake City, Salt Lake County, Summit County,
20 which includes Park City, Moab, so you know, anywhere from
21 coastal cities to you know, the interior we're seeing
22 certain communities as well as certain buckets, typical
23 option large tech companies demanding that supply.

24 And to create that -- again, as others have
25 noted, it's really not possible to do it entirely locally,

1 and it's certainly not the least cost as I've commented
2 earlier, we've got tremendous access across the west and
3 very low cost renewables, but that does require
4 transmissible substations and the you know, other tools in
5 order to arrange that.

6 So that is part of what's driving our whole
7 overall system changes over the next 10 years.

8 MS. RODER: Thank you very much Mr. Bird. I
9 give it back to you Commissioner. I do not see any other
10 raised hands, thank you.

11 COMMISSIONER MCNAMEE: Great. Well those answers
12 are helpful and at least gives me some comfort that overall
13 things are okay, but clearly, it's something that needs to
14 be continually monitored. And this will be my last
15 question. And it's open-ended, but you know, when we do
16 these sorts of conferences, especially when we're dealing
17 with a crisis, the issues tend to be you know, what are the
18 problems? What are the challenges? How are we handling it?

19 And the good news is it sounds like everybody's
20 been doing a pretty good job and I applaud everybody for
21 what they've been able to do. But sometimes there's good
22 news that comes out of these challenges. We discover things
23 that we didn't know.

24 I know that I think everybody's lucky that
25 technology has been one of the great saviors of this whole

1 process with so many people being able to work from home,
2 work efficiently. We're finding that we have the ability to
3 do things we didn't know. But in terms of you know, the
4 electric grid, generation, transmission, energy efficiency,
5 any of those things and just the operation or forecasting,
6 what's the good news out of it?

7 What happened during this period that you all
8 said, "Wow, I wish this hasn't happened, but I'm glad I
9 learned this because it's something that we should be doing
10 in the future even when we get out of this crisis." I know
11 that's open-ended, but hopefully there's some of those new
12 stories.

13 MS. RODER: Thank you very much Commissioner. I
14 see that Mr. Moeller has his hand raised. Please go ahead.

15 MR. MOELLER: Thank you. For us the thing that
16 we found the most interesting was the resilience of our
17 employees. So for you know, 15 years we would have all
18 employee meetings once a quarter, and they never worked very
19 well because everybody is in the room and nobody has asked a
20 question.

21 A week into this crisis we had an all employees
22 meeting, and we had all 900 of our employees participate.
23 The ability to interact -- it's the same technology we're
24 using today, the ability to interact between employees and
25 management was substantially better using the Webex

1 technology than it was when we were trying to have actual,
2 in-person meetings.

3 So I think the actual learnings have mostly to do
4 with the ability of the employees to participate from these
5 remote locations and frankly, it's having us rethink our
6 strategies of just how much building space do we need and do
7 we need to occupy that building every day.

8 MS. RODER: Thank you very much Mr. Moeller. I
9 will call on Curt Morgan. Please go ahead Mr. Morgan.

10 MR. MORGAN: Okay. I think Clair hit it probably
11 most importantly in the resilience of the people. You know,
12 but I think some other things that maybe are a little bit
13 more operational in nature that I'll share. You know, one,
14 our ability on the supply chain side to get you know, I
15 think I said in my opening remarks, there were 86
16 maintenance outages and I was concerned about, you know, the
17 parts, and equipment and also getting the PPE.

18 But our supply chain, you know, folks had done a
19 tremendous job of getting it. In fact, we've been able to
20 help out some hospitals and provide them with N95 masks and
21 other things that we have. So that, you know, we're very
22 proud of our, you know, ability to get what we needed, to do
23 the obvious, just to keep our people safe and then to be
24 able to execute on those outages and just the you know, the
25 willingness of people to come in to the work environment

1 with the unknown was tremendous.

2 And you know this temperature testing thing was
3 not easy in terms of whether people might or might not be
4 willing to do it and whether it was an infringement on
5 people's rights. So we had to have legal assessment of
6 that, and we did that very quickly, but everybody worked
7 together in harmony.

8 I do agree with Clair too, that you know, we did
9 -- I did weekly livestreams and we were terrible about it at
10 the beginning and then getting the technology to work, but I
11 really believe that at the end of the day our company is
12 closer today than we were prior.

13 I get emails from people all the time about they
14 hope that we continue to do our weekly livestream. And this
15 was just borne out of the fact that we were trying to make
16 sure that we touched our people, and in the middle of
17 obviously a major crisis. But turned into something that
18 you know, people, I learned very quickly, people just want
19 to be communicated with. They want to know what's going on
20 inside the company.

21 And that helped them actually be more effective
22 than the job and to be happier in what they're doing. So
23 those are a few little observations Commissioner McNamee
24 that I would share. Thank you.

25 MS. RODER: Thank you very much Mr. Morgan. I

1 will call on Mr. Quiniones. Please go ahead sir.

2 MR. QUINIONES: Thank you very much. In our case
3 back in 2014 we decided to embark on an enterprise-wide
4 digital transformation and really invest end to end digital
5 technology, both on the IT and the OT side. And we found
6 that it was invaluable for us to be able to stream.

7 Right now we're streaming 40,000 sensor points
8 and know the exact health and condition of our assets. We
9 are also monitoring our retail customers we have mostly
10 government buildings here in New York, over 22,000 of them
11 we have created digital twins of their energy system. So
12 why most of them are not open, or are now in the process of
13 reopening here in New York, that we are able to really see
14 what's going on with their energy system.

15 So we have decided to double-down and we're going
16 to accelerate our digital transformation. We plan to stream
17 about 150,000 sensor points real-time by next year. We're
18 building a fiberoptic backbone to connect all of our assets
19 and we're going to be investing in private wireless network,
20 so that we could really enable digital workers at the power
21 source. Thank you.

22 MS. RODER: Thank you very much. I'll call on
23 Mr. Segal. Please go ahead sir.

24 MR. SEGAL: Thank you. I would say that when we
25 went into this event, certainly no one had anticipated

1 something like this happening. It hadn't happened for well
2 over 100 years. And I think what it does is it demonstrates
3 the resilience and the ability of the industry to band
4 together and respond to unexpected situations. I think for
5 us -- and I can tell you I've been during the pendency of
6 this event, on the phone with a number of the other
7 participants thinking about situations that thank goodness
8 didn't come to pass -- and for even worse than what we've
9 experienced here.

10 I think that that in part is part of the lesson
11 here. We need to continue to think about being prepared for
12 a wide-range of alternatives, being prepared for the future
13 and again, the kind of leadership that we saw from folks
14 like Gil who stepped forward very early in this event and
15 helped to create the basis for greater mutual cooperation
16 among, for example, New York owners of generation and
17 transmission -- that kind of leadership and the sense that
18 we are a community trying to deliver a critical service in
19 incredibly difficult times was comforting to those of us
20 working in the industry.

21 And certainly leading companies and we're
22 grateful to have gotten through those darkest times not
23 having experienced the worst case, but also grateful that we
24 had the opportunity at least to think about what they could
25 be and so we can begin to plan for it. Thank you.

1 MS. RODER: Thank you very much. I will call on
2 Chairman Randazzo. Please go ahead sir.

3 CHAIRMAN RANDAZZO: Thank you. I will echo the
4 comments that the others made and just my only experience
5 with our staff -- we have used the streaming capabilities on
6 a weekly basis to have all staff meetings. We've been
7 trying to help people deal with the stress associated with
8 the pandemic and a number of other issues, the efforts to
9 try and promote racial justice have all been stressful
10 experiences for a lot of people, but I think the
11 experiences have helped to make our interconnectedness more
12 visible, thereby highlighting the importance of coordination
13 and communication of the proactive type.

14 You know we say a lot these days, we're in this
15 together, but it's more visible I think, in a lot of ways.
16 And whether we can maintain that kind of attitude going
17 forward to accomplish some of the things that you talked
18 about today, remains to be seen. It's largely on us as
19 individuals and as a society.

20 But we benefit -- it tends to bring the problem
21 solving characteristics of humans to the surface and we
22 certainly need it in times like this, but we also need it
23 after we get through this. So my hope is that the
24 experience will elevate our problem solving nature and allow
25 it to dominate more fully as we get through these

1 challenges and the others that are on the table.

2 MS. RODER: Thank you very much. I'll call on Mr.
3 Bird. You're up next, please go ahead sir.

4 MR. BIRD: Yeah thank you, Commissioner, for the
5 question. And similar to my colleagues, I couldn't be
6 prouder of our folks, 5,000 plus employees across
7 PacificCorp to really answer the call. As I mentioned,
8 there was quite a task and we drill all the time across not
9 only our company, but with our colleagues across energy and
10 even nationally.

11 I think those exercises that the FERC has helped
12 sponsor have shown to be highly valuable and we hope to
13 never exercise them, but we've seen tremendous results here
14 as you know, none of these disasters today have impacted our
15 ability to serve. And some of my colleagues, I compliment
16 the Electric Institute and the cooperation across the
17 industry as well as on the utilities.

18 I've not experienced anything quite like it in
19 any other industry where there's so much cooperation and
20 collaboration, particularly in these times of crisis,
21 whether it's a storm, a response or an event like a
22 pandemic, there's tremendous sharing so that all of us can
23 be a little further ahead and I think that's gone to serve
24 our communities.

25 One note -- anecdotal highlight and I think there

1 was a bit of a surprise as we had a lot of folks working
2 from home, our IT folks, similar to we've had a digital
3 transformation of our company in the last few years that
4 continues. But it was interesting on the customer service
5 side we had not traded that capability to work from home,
6 but that was very rapidly built within a few days,
7 implemented, so that a number of our customers working from
8 home, and as we experienced an outage -- I think it was in
9 Utah or Idaho, we had almost instantaneous response from
10 folks who didn't have to drive 45 minutes to get to the
11 office.

12 They were immediately providing that service. So
13 some silver-lining to the impacts of COVID and to be able to
14 actually improve customer service. Thanks for the question.

15 MS. RODER: Thank you Mr. Bird. Commissioner
16 McNamee, there are no other hands raised. If either of you
17 can hand it back to the Chairman.

18 COMMISSIONER MCNAMEE: Okay. Well I want to
19 thank everybody for those comments and for your time today
20 and I think what's most interesting is all of you focused on
21 the silver-lining with the people and the relationships, and
22 I think that's a great testament to all of you, to your
23 workers, but also to the American spirit, so thank you all.

24 CHAIRMAN CHATTERJEE: Well thank you Commissioner
25 McNamee, Commissioner Glick, all of our panelists. I want

1 to again thank everyone for taking the time to join us today
2 for this discussion and of course, a huge, huge thanks to
3 FERC staff team for expertly shepherding us through our
4 agenda. I hope today's conversation is just the beginning
5 of our efforts to examine and tackle the potential long-term
6 effects of the Corona Virus Pandemic on the energy industry.

7 I know I personally learned a lot and look
8 forward to doing the hard work with my colleagues to ensure
9 that we stay engaged in these critical ideas as we move
10 forward through this national emergency. I look forward to
11 seeing everyone tomorrow for Day 2 of the COVID-19 Technical
12 Conference beginning at 9:00 a.m. And with that I will turn
13 it back over to Aileen.

14 MS. RODER: Thank you very much Mr. Chairman. I
15 appreciate everybody's participation today. Thank you very
16 much to all of the panelists and we will see you tomorrow
17 morning. We'll be beginning at 9:00 a.m. asking panelists
18 for the morning to go on between 8:30 and 8:45. Thank you
19 very much and good night to everyone.

20 (Whereupon the Conference concluded at 4:00 p.m.)

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This is to certify that the attached proceeding
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Impacts of the COVID-19 on the Energy Industry

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Place: Washington, DC

Date: Wednesday, July 8, 2020

were held as herein appears, and that this is the original
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Gaynell Catherine

Official Reporter

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