

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

CONSENT ELECTRIC, CONSENT GAS,  
CONSENT HYDRO, CONSENT CERTIFICATES,  
DISCUSSION ITEMS, STRUCK ITEMS

1061st COMMISSION MEETING

Thursday, November 21, 2019

Commission Meeting Room

Federal Energy Regulatory Commission

888 First Street, NE

Washington, D.C. 20426

1                   The Commission met in open session at 10:26 a.m.,  
2 when were present:

3                   CHAIRMAN NEIL CHATTERJEE

4                   COMMISSIONER RICHARD GLICK

5                   COMMISSIONER BERNARD McNAMEE

6                   SECRETARY KIMBERLY D. BOSE

7

8    Agenda Items:

9    Consent-Electric

10   E-1,E-2, E-3, E-4, E-5, E-6, E-7, E-8. E-9 E-10, E-12, E-13,  
11   E-14, E-15, E-16, E-17, E-18, E-19, E-20, E-22, E-23, E-24,  
12   E-25, and E-26

13

14   Consent-Gas

15   G-1, G-2, G-3, G-5 and G-6

16

17   Consent-Hydro

18   H-1 and H-2

19

20   Consent-Certificates

21   C-1, C-2, C-3, C-4, C-5 and C-6

22

23   Discussion Items

24   A-3, A-4, and E-11

25

1 Struck Items

2 None

3

4

5 Commissioner Recusals and Statements for November 21, 2019

6 E-2 - Commissioner McNamee concurring with a separate  
7 statement

8 E-3 - Commissioner McNamee concurring with a separate  
9 statement

10 E-4 - Commissioner McNamee concurring with a separate  
11 statement

12 E-11 - Commissioner Glick dissenting in part with a separate  
13 statement

14 C-1 - Commissioner Glick dissenting with a separate  
15 statement

16 C-2 - Commissioner Glick dissenting with a separate  
17 statement

18 C-3 - Commissioner Glick dissenting with a separate  
19 statement

20 C-4 - Commissioner Glick dissenting in part with a separate  
21 statement

22 C-4 - Commissioner McNamee concurring with a separate  
23 statement

24 C-5 - Commissioner Glick dissenting with a separate  
25 statement

1 C-6 - Commissioner Glick dissenting with a separate  
2 statement

3

4 Discussion and/or Presentations

5 A-3 - Presentation by M. Cristina Melendez (OE) accompanied  
6 by Kurt. H. Jacobs (OE) and John L. Karp (OE)

7 A-4 - Presentation by Barry Kuehnle (OER), David Capka  
8 (OEP), and Craig Barrett (OEIS)

9 E-11 - Presentation by Seth Quinn (OGC) accompanied by Adam  
10 Pollack (OEMR) and Richard Howe (OGC)

11

12 Struck Items

13 None

14

15

16

17

18

19

20

21

22

23

24

25

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

2 (10:26 a.m.)

3 CHAIRMAN CHATTERJEE: Madam Secretary, we are  
4 ready to begin.5 SECRETARY BOSE: Good morning, Mr. Chairman.  
6 Good morning, Commissioners.7 This is the time and place that has been noticed  
8 for the open meeting of the Federal Energy Regulatory  
9 Commission to consider the matters that have been duly  
10 posted by the Commission. Please join us in the Pledge of  
11 Allegiance.

12 (Pledge of Allegiance recited.)

13 SECRETARY BOSE: Commissioners, since the October  
14 meeting the Commission has issued 55 Notational Orders.  
15 Thank you, Mr. Chairman.16 CHAIRMAN CHATTERJEE: Thank you, Madam Secretary,  
17 and good morning to everyone. We have a full agenda today,  
18 but I want to start off by highlighting item E-11. In  
19 today's Order, the Commission establishes its new  
20 methodology for analyzing the base return on equity for  
21 public utilities and applies this new methodology to two  
22 complaint proceedings involving the MISO Transmission  
23 Owners.24 Although Commissioner Glick is issuing a partial  
25 dissent on one of the many issues addressed in this Order, I

1 want to point out that we reached a consensus on the  
2 methodology we are adopting in this Order, and the Base ROE  
3 established in this order for the MISO Transmission Owners.

4 I believe the methodology we adopt in the Order  
5 is legally durable and technically sound, and I am very  
6 pleased that this will be our approach moving forward.

7 After many years of litigation over these issues,  
8 I think the actions we are taking today will help provide  
9 much-needed certainty to both industry and consumers for  
10 many years to come.

11 I want to thank the staff for their hard work,  
12 and I look forward to their presentation.

13 Another item we will be discussing today that is  
14 extremely important to me is cybersecurity. Here at FERC  
15 we have a world-class staff of security experts who work  
16 hard each day to defend our critical infrastructure against  
17 malicious actors. Today, staff will be presenting their  
18 priority focus areas for 2020 and describe just a few of the  
19 many activities they are undertaking to help safeguard our  
20 Nation's infrastructure.

21 In addition to what I know will be an extremely  
22 informative presentation, I would like to take this  
23 opportunity to announce an organizational realignment that  
24 will help the Commission better implement its  
25 responsibilities under Section 215 of the Federal Power Act.

1           Effective November 24th, I have directed the  
2 creation of a new Division of Cybersecurity in the Office of  
3 Electric Reliability. Currently one division in OER is  
4 responsible for overseeing the development of all  
5 reliability standards filed at the Commission, including  
6 standards that relate to Critical Infrastructure  
7 Protection, known as CIP Standards, as well as non-CIP  
8 standards.

9           The division also enforces compliance with the  
10 CIP standards, while a different division is responsible for  
11 overseeing compliance with the non-CIP standards. Today's  
12 change will create one division focused on both the  
13 development of and compliance with CIP standards--the  
14 Division of Cybersecurity--and another division focused on  
15 the development and compliance with operations and planning  
16 standards--the Division of Operation and Planning  
17 Standards.

18           This change will focus each division on the full  
19 life-cycle of standards development and compliance, which is  
20 critical given the rapid evolution of cyber threats and  
21 advances in technology.

22           I expect this reorganization will promote more  
23 efficient execution of OER's responsibilities under Section  
24 215, and I thank Andy Dodge and the rest of the leadership  
25 in OER for their excellent work in facilitating a smooth

1 transition.

2           Also in today's program, FERC's Office of  
3 Enforcement will present the 2019 Report on Enforcement.  
4 This annual report is one of the key ways that FERC staff  
5 shares information with the regulated community and the  
6 public about its enforcement activities.

7           This report is designed to increase transparency  
8 across all of OE's work, including investigations, audits  
9 and accounting, analytics and surveillance, and market  
10 oversight. OE's work is critical to safeguarding our  
11 markets, and so I am looking forward to staff's presentation  
12 today.

13           Today the Commission is approving three new LNG  
14 export projects proposed for Cameron County, Texas: Texas  
15 LNG Brownsville, Rio Grande LNG, and Annova LNG. We are  
16 also certificating Corpus Christi Liquefaction Stage III, an  
17 additional liquefaction train to be located at an existing  
18 LNG export facility.

19           I just want to take a moment to express my  
20 appreciation for the work that Commission staff has done to  
21 ensure that we do not miss this crucial period for  
22 developing an export market for U.S. gas.

23           Since the beginning of calendar year 2019, the  
24 Commission has certificated 20.2 Bcf/day of liquefaction  
25 capacity and 2.8 Bcf/day has entered service. At this time,



1 there is 32 Bcf/day of liquefaction capacity that has been  
2 authorized, with 13 Bcf/d of that capacity already under  
3 construction, commissioning , or preparing for development.

4 I think that is a monumental achievement, and I  
5 believe staff is to be congratulated for their efforts.

6 The Commission is also approving El Paso's South  
7 Mainline Expansion Project to serve markets in Texas, New  
8 Mexico, Arizona, California, and Mexico. Since I joined the  
9 Commission, we have approved natural gas pipeline  
10 certificates representing 2,418 miles of pipeline, and over  
11 50 Bcf/day of natural gas pipeline capacity. To put that in  
12 context, 50 Bcf/day of capacity could carry over 55 percent  
13 of 2019 U.S. dry natural gas production.

14 Now on to today's agenda:

15 Today we are taking action on the Order 841  
16 storage compliance filings of MISO, ISO New England, and the  
17 California ISO. In these three significant orders, Items  
18 E-2, E-3, and #-4, the Commission accepts the compliance  
19 filings and provides directives for further compliance.

20 At last month's meeting, I underscored how  
21 pleased I am that the Commission is moving forward in  
22 implementing our landmark storage rulemaking. One of my top  
23 priorities continues to be ensuring that storage resources  
24 can compete on a level playing field in our organized  
25 markets and addressing artificial market barriers. Today we

1 take three big steps forward in that effort.

2           These three orders represent a huge amount of  
3 time, effort, and technical expertise from the RTOs and  
4 their stakeholders, as well as from the FERC staff teams  
5 that processed them. I want to extend my thanks to FERC  
6 staff for their excellent work in these proceedings.

7           We are also taking action on our first set of  
8 Order 845 interconnection compliance filings in Items E-5  
9 through E-10. In these orders, the Commission finds that  
10 all six compliance filings partially comply with the  
11 Commission's interconnection rulemaking, and directs each  
12 transmission provider to submit a further compliance filing.  
13 These orders will result in increased transparency, better  
14 accommodate technological advancements, and allow for more  
15 efficient use of the transmission system. I am very  
16 pleased with staff's thorough work on these important  
17 orders.

18           Item E-1 on today's agenda is a final rule  
19 addressing the effects of the Tax Cuts and Jobs Act on  
20 accumulated deferred income taxes, or ADIT, as it applies to  
21 transmission providers.

22           This unanimous final rule largely follows the  
23 NOPR's proposals, with a few adjustments that my colleagues  
24 and I agreed on in response to the informative and  
25 thoughtful comments we received.

1           I have learned a lot more about ADIT over the  
2 past couple of years than I ever wanted to know, but I am  
3 pleased with this final rule which continues our efforts to  
4 pass along the benefits of the Tax Cuts and Jobs Act to  
5 ratepayers. Many thanks to the team that worked through  
6 these truly complex issues.

7           With that, I will conclude my remarks and turn to  
8 my colleagues for any additional opening statements or  
9 announcements that they may have.

10           Commissioner Glick?

11           COMMISSIONER GLICK: Thank you, Mr. Chairman. I  
12 do have a few items that I want to talk about today. Maybe  
13 I could start with C-5, from which I am dissenting.

14           C-5 is particularly--is basically a denial of a  
15 rehearing in the Spire case. That was where the Commission  
16 last year approved a Certificate of Public Convenience and  
17 Necessity for Spire to build a pipeline in Missouri to serve  
18 its affiliate, Spire-Missouri, which is an LDC.

19           Now I found the original order troubling, and I  
20 find this particular order, this rehearing order  
21 particularly troubling, because there is absolutely no  
22 evidence in the record to suggest need. The Natural Gas Act  
23 requires us to assess whether a particular pipeline is  
24 needed or not, and there is nothing at all in the record to  
25 suggest need.

1           Now in the past my colleagues and I have differed  
2 on what you do in terms of assessing whether a project is  
3 needed or not. The Commission generally recently has  
4 typically relied, or exclusively relied on the existence of  
5 PRSN agreements. And we had a discussion about whether PRSN  
6 agreements are sufficient or not to assess whether a project  
7 is needed or not, it is particularly problematic, at least  
8 in my view, when the PRSN agreement is made with an  
9 affiliate--because it does not necessarily reflect that  
10 arm's length negotiation that is suggests there is real need  
11 in the market.

12           In this case I think it is even more egregious  
13 than the normal circumstance because the pipeline is being  
14 built in a region that has no demand. Some people suggest  
15 actually the demand is declining for natural gas in the  
16 region. And there is more than enough pipeline capacity in  
17 the region to already meet the need.

18           You know, as everyone here I think knows, I  
19 typically complain about many of these pipeline orders,  
20 suggesting we do not do enough to examine the greenhouse gas  
21 emissions associated with the pipelines. In this particular  
22 case, I am not making that point because there actually are  
23 no greenhouse gas emissions associated with the pipeline  
24 because there are no extra molecules of gas flowing through  
25 these pipelines. And that actually makes the point. It

1 makes the point that it is not needed because there is no  
2 extra capacity because there is no extra gas needed to flow  
3 into the region.

4           Now all Spire-Missouri is really doing is  
5 shifting from a non-affiliated pipeline which it currently  
6 contracts for to receive gas service, to an affiliate. And  
7 the affiliate obviously, and its corporate parent, they are  
8 trying to enrich themselves. And I understand we are in  
9 capitalism and they have a pretty good rate of return  
10 associated with this particular pipeline and they can  
11 essentially achieve their corporate goals, their corporate  
12 revenue goals.

13           But we have a duty under the Natural Gas Act to  
14 make sure a project is needed or not. Because what  
15 consumers end up doing is paying more in the long run when  
16 you have extra capacity that you do not need. And I think  
17 that is one of the reasons Congress enacted the Natural Gas  
18 Act.

19           This case is even more important I think than in  
20 most because--well, for two reasons, one of which is when we  
21 issue a pipeline certificate and we find a project is  
22 needed, and one of the things that comes along with that  
23 certificate is imminent domain authority, and so we have to  
24 be very careful here. We should not take this very lightly.

25           If a company--just because it has a PRSN

1 agreement with an affiliate, to me that does not suggest  
2 need, particularly in this particular case where there is no  
3 extra demand for natural gas.

4           Secondly, the Missouri Public Service Commission-  
5 -the Commission says I think in its response, well, don't  
6 worry, the Missouri Public Service Commission will be able  
7 to protect consumers if there is excess of natural gas  
8 pipeline capacity built. But that is not the case in this  
9 particular proceeding.

10           The Missouri Commission came to us and said:  
11 FERC, you need to act here. You need to prevent this  
12 pipeline from going forward, because all we can do is wait  
13 for the pipeline to be built, wait for it to be up and  
14 running, and then we are going to come in for an  
15 after-the-fact prudence review. Well that is really going  
16 to help much once the pipeline is already built. I think  
17 obviously the company is going to have to figure out a way  
18 to make its money.

19           So I think, you know, a lot of people say--you  
20 know, some people joke about is there a rubber stamp when it  
21 comes to pipeline decisions at the Commission? And I think  
22 when we issue decisions like this, without any evidence I  
23 the record to suggest that there is need, I think we kind of  
24 further along that thought process here that there really is  
25 a rubber stamp. And I think that is a problem.

1           So I have a concern with that particular order.

2           I am going to move on to C-1, C-2, C-3, and C-6,  
3 which as the Chairman alluded to are four separate orders  
4 approving LNG projects, including the three projects in the  
5 same county in southeast Texas, Texas LNG, Rio Grande LNG,  
6 and Inova LNG. And like a lot of other orders I have  
7 dissented on with regard to the LNG projects, I think the  
8 Commission has not examined, or the Commission has failed to  
9 respond to its requirements under the Natural Gas Act by  
10 failing to examine the significance of whether the  
11 greenhouse gas emissions associated with the project are--  
12 what their impact is on climate change.

13           I am not going to say much about that except for  
14 one particular project, which I think is the Rio Grande  
15 project. There are more than 9 million metric tons of CO2  
16 annually that are going to be emitted from that project.  
17 That strikes me as a lot, but again we are not addressing  
18 significance. We can get into that little bit later.

19           But I think there are some interesting other  
20 impacts with particularly the three Texas projects that I  
21 just want to briefly mention. The Environmental Impact  
22 Statements associated with these projects all say that there  
23 are significant adverse impacts to the environment. And the  
24 impacts I think are for the most part on endangered species  
25 such as the ocelot, the jaguarundi, if I am pronouncing that

1 right, and the Apomalto Falcon. And I have said before, and  
2 the courts have said before, we have to consider whether--  
3 when we consider whether a project is in the public  
4 interest, we essentially balance the benefits of the  
5 project, and there are a lot of benefits with these projects  
6 we can balance, against the adverse impacts.

7           But in this case, the three orders with regard to  
8 the southeast Texas projects, we just say, yeah, there are  
9 significant environmental impacts, but we don't do anything  
10 with it. We don't actually respond and say, okay, well  
11 these are significant, but we think the benefits of the  
12 project outweigh it. We just say it is significant and we  
13 move on.

14           So I don't think that's necessarily a reasoned  
15 decision making.

16           One other point, quickly, I want to make is that  
17 again these three projects in southeast Texas are built in  
18 very economically disadvantaged areas. And I think we need  
19 to recognize that there's potential benefits from building  
20 these projects. There's going to be construction jobs and  
21 other economic development associated with these particular  
22 projects.

23           We also need to take into account that the  
24 residents of these areas don't necessarily have the means to  
25 hire the law firms and the consultants that are necessary to



1 litigate some of the issues associated with air quality and  
2 water quality, and the impacts on their local communities.

3           And so I just think it's very important that when  
4 we examine particular applications, whether it be for LNG  
5 facilities or other infrastructure projects, that we make  
6 sure that we take into account in a meaningful way the  
7 impact that these projects might have on the local  
8 communities.

9           I just want to finish up talking about C-4, which  
10 I am actually partially dissenting on. That is El Paso  
11 South Mainline Expansion Project which we are approving  
12 today. And, you know, as is typical, my dissent focuses on  
13 the Commission's refusal to consider the significance of the  
14 greenhouse gas emissions associated with the project, at  
15 least in terms of climate change.

16           But I wanted to take a minute to address some of  
17 the arguments Commissioner McNamee makes in his concurring  
18 opinion. At the outset I want to note that, you know,  
19 Commissioner McNamee, I think some people may have noticed  
20 that we disagree at times, right? But, you know, I want to  
21 say, and I really do mean this, that I have the utmost  
22 respect for Commissioner McNamee's intellect and his  
23 integrity. Because I know when he takes a position, he  
24 truly believes it, and I think that is very important for  
25 each Commissioner to do.

1           But I recommend that--you know, he has a  
2   concurring opinion in this proceeding. It is a 35-page  
3   concurring opinion. It took me a little while to read it,  
4   but it was very interesting. And actually I strongly  
5   recommend that everyone interested in this particular topic  
6   read it. It kind of reads like a law review article. And,  
7   Commissioner McNamee, if you want any advice on writing law  
8   review articles on climate change, I would be glad to help  
9   out there.

10           (Laughter.)

11           COMMISSIONER GLICK: But I strongly agree with  
12   some of the contents in the concurring opinion. I just want  
13   to briefly outline that.

14           I think, you know, the Commissioner says that the  
15   courts have told us that you have to consider environmental  
16   impacts associated with a project, reasonably foreseeable  
17   environmental impacts, and that can include climate change,  
18   the impacts on climate change. And that can play a role in  
19   determining whether the project is in the public interest.

20           But the concurrence says the courts are wrong.  
21   Well, you may disagree with the courts, you may or may not  
22   disagree with the court--sometimes I don't like what the  
23   courts say, either--but I think we have to live with what  
24   the court said. But Commissioner McNamee often says, you  
25   know, our job is to apply the law and the facts, and I think

1 that is exactly right.

2 But it cannot mean that we only apply the laws  
3 that we agree with, the court decisions that we agree with.  
4 Sometimes we agree with them, sometimes we don't.  
5 Especially in this particular case, unelected bureaucrats  
6 shouldn't be deciding which judicial precedents are right  
7 and wrong. It is kind of startling that that is kind of the  
8 argument that we've gotten into.

9 The courts have told us that in pursuing our  
10 obligations under the Natural Gas Act, the Commission is  
11 supposed to determine whether a project's benefits outweigh  
12 the averse impacts associated with the project, as I  
13 mentioned earlier. And the courts have again told us that  
14 we could reject a project if the environmental impacts are  
15 so significant, and that includes--the courts have said--  
16 includes the environmental impacts associated with climate  
17 change,

18 But the question comes to mind, you know, I just,  
19 I have a--you know, we continuously have this debate, and I  
20 don't want to prolong it too much, but I still can't  
21 understand why we're treating climate change different than  
22 all other significant environmental impacts associated with  
23 a project.

24 And, actually, I can understand it. Because  
25 everyone here knows--everyone in this room knows why.

1 Everyone one knows that's watching on the Internet knows  
2 why. It's because it's "climate change." That is the  
3 subject that no one wants to talk about. It's the third  
4 rail of regulatory politics.

5           The irony is, you know, a commissioner can say I  
6 don't believe in climate change, or I think 95 percent of  
7 the world's scientists are wrong here. Everyone has the  
8 right to do that. And then you could say, therefore, I am  
9 deciding there's no significant environmental impacts  
10 associated with the greenhouse gas emissions associated with  
11 the project.

12           But we're not even doing that. We're just saying  
13 we can't consider the significance. We're making up some  
14 phony, in my opinion, mumbo jumbo arguments just to avoid  
15 having to say whether a project has significant climate  
16 change impacts. And that's disturbing to me.

17           So I'm just frustrated with that. And with that,  
18 I'll end it. Thank you, Mr. Chairman.

19           CHAIRMAN CHATTERJEE: Commissioner McNamee.

20           COMMISSIONER McNAMEE: Thank you, Mr. Chairman.  
21 As you and Commissioner Glick mentioned, there's a number of  
22 issues that we're dealing with in today's meeting, and I  
23 think it moves the Commission. I think it moves our agenda  
24 forward, and I think it is good for us to be resolving a  
25 number of these issues.

1           I also think it is going to be good that we're  
2 going to be hearing about our enforcement actions, about  
3 cybersecurity, and as we go through this process I think  
4 there will be a lot of illuminating information.

5           Just a couple of comments, to keep us moving  
6 along. First of all, we are issuing a number of orders,  
7 compliance orders, in relation to 841, which is the Storage  
8 Order that's been mentioned before. I once again am issuing  
9 a concurrence consistent with my previous concurrence and  
10 partial dissent in the 841-A Order. I firmly support  
11 ensuring that energy storage resources are able to  
12 participate in the wholesale markets, as--I won't go into  
13 elaborate detail, but I didn't think that the Commission had  
14 the authority to require that those resources connect at the  
15 distribution level, or behind the meter. And all my  
16 concurrences do is say that, the compliance filings have  
17 complied with the Commission's Order and just to note my  
18 previous comments about the limits to the Commission's  
19 authority and we had them in the states, and all that  
20 popped out.

21           Not to overly prolong the Glick-McNamee show on  
22 climate change and GHG emissions, but these are important  
23 issues. And I will talk a little bit about my concurrence  
24 in a moment, but I think it's important that we need to  
25 consider in some of these orders, such as Spire, we need to

1 deal with what's in the record.

2           And I understand Commissioner Glick's concern  
3 that the parent company may be trying to enrich itself, but  
4 that wasn't in the record. And we have to deal, when we  
5 make these decisions, with what's in the record not what we  
6 may think may be going on behind the scenes.

7           Secondly, when we deal with the LNG facilities I  
8 think Commissioner Glick is absolutely right that we need to  
9 pay particular concern to issues such as the Environmental  
10 Species Act and potential harms there, and to environmental  
11 justice issues. And, as he acknowledged, there are--at  
12 least on the environmental justice issues, there are  
13 definitely significant benefits to the local communities.  
14 There aren't unique harms to those communities, and I think  
15 reasonable people can disagree about what the result on  
16 that is.

17           In terms of the Endangered Species, I think it is  
18 important to know that our orders maintain that, without  
19 going into the complicated process, but there's basically  
20 you have to get a take permit, and you have to get from Fish  
21 & Wildlife, or other agencies, in order to make decisions  
22 about whether or not you're complying with the Environmental  
23 Species Act.

24           And our orders require that sort of compliance.  
25 We're not ignoring the issue of potential dangers to

1 environmental--to endangered species. Rather, we're making  
2 a requirement within the order that there has to be  
3 compliance with those requirements that are imposed.

4           And I do want to talk a little bit, as  
5 Commissioner Glick has previewed, that I have issued a, as  
6 he noted and I'll agree, a quite lengthy concurrence in  
7 relation to the El Paso Natural Gas Pipeline Order.

8           And the reason I did this is, we've had--and you  
9 all have been witness to it--a number of back-and-forths  
10 about, you know, what are our positions? And I thought  
11 that Commissioner Glick and those who are here and those who  
12 are interested deserve to have my thoughts in writing about  
13 what's going on. And so I prepared this analysis.

14           But before going into the analysis, I think it's  
15 important to address one thing that Commissioner Glick  
16 brings up. And that is, that somehow I am ignoring the  
17 courts, or I am thumbing my nose at the courts, or that I am  
18 choosing the law as I want it to be not as it is. And  
19 nothing could be farther from the truth.

20           As is stated in my concurrence, and we recognized  
21 the requirements of Sable Trail, and we complied with it.  
22 You will notice in our Order that we identified the  
23 greenhouse gas emissions that are coming downstream that  
24 will be emitted by the electric generation facility. We  
25 quantify those and put them in the Order.

1           So we are complying with the Order. I also  
2 believe that that's binding on us. So there's no doubt in  
3 my opinion, and hence the reason I fully support the full  
4 Order, that we have complied with the requirements of the  
5 court.

6           But the one thing I would take note of is that  
7 there seems, in my opinion, there's been an interpretation,  
8 a respectful one, that I believe that Commissioner Glick and  
9 others have made that the narrow decision based on the facts  
10 in the Sable Trail case, and then with the Dicta in Lorrie  
11 Birkhead case, that somehow it has created broader powers  
12 and changed our interpretation, or the purpose of the NGA,  
13 its stated purpose or NEPA, then it actually has.

14           And my view is, at the Commission we are still  
15 bound by the text of the NGA and NEPA as enacted by  
16 Congress. And, by the interpretation for those acts by the  
17 U.S. Supreme Court, as well as the D.C. Circuit. And that  
18 our obligation is to read those statutes and the case law in  
19 harmony.

20           Therefore, my concurrence is an attempt to  
21 articulate how we can read all of those pieces in harmony,  
22 and why the Commission continues to follow the requirements  
23 within the limitations imposed on us by the Acts and the  
24 courts, on what we can do in relation to measuring  
25 greenhouse gas emissions and the conditioning of whether we



1 approve such a facility.

2           And to give you a little bit of a preview of the  
3 issues. I think it is important to consider the fact that  
4 there's really two. That when we consider a certificate  
5 application, the Commission has two primary statutory  
6 obligations: to determine whether the project is required  
7 by the public convenience and necessity as required by  
8 Section 7 in the NGA; and to take a hard look at the  
9 direct, indirect, and cumulative effects of the proposed  
10 action as required by NEPA and through the CEQ regulation.

11           I firmly believe that we have complied with those  
12 requirements. The crux of the debate, however, is whether  
13 the Commission has the authority under the NGA and NEPA to  
14 deny an application for natural gas pipeline certificate  
15 applications based on the environmental effects related to  
16 the upstream production, or the downstream use of natural  
17 gas that will use the pipeline. And I don't believe that we  
18 do, except in the cases defined by Sable Trail.

19           First of all, it is important to recognize, as  
20 was mentioned before, that Section 7 use the term "public  
21 convenience and necessity." Now I recognize that the  
22 Commission and the courts have often equated public  
23 convenience and necessity with public interest. However,  
24 the Supreme Court in NAACP v. FERC stated that that does not  
25 mean that the Commission has broad rights to promote the

1 general public welfare, or address the greater societal  
2 concerns. Rather, the courts have to look at the words and  
3 take the meanings from the purpose of the regulatory  
4 legislation.

5           So therefore if you review the text of the  
6 Natural Gas Act, including Section One's use where it does  
7 use the public interest, it makes clear that the purpose, as  
8 stated by Congress in the text, not legislative history, is  
9 that its purpose is to promote the public's access and use  
10 of natural gas. And it does so primarily by providing the  
11 Commission with the authority to regulate the rates and  
12 providing the power of imminent domain.

13           To the extent that the Commission considers  
14 environmental impacts, the NGA focuses on our approving the  
15 routes, the pipeline, the actual facility, and to make  
16 determinations about the direct and indirect impacts of the  
17 construction and operation of the pipeline.

18           And we also have to look on a pipeline when you  
19 have a compressor station with the actual GHG emissions, of  
20 those compressor stations, because that's related to the  
21 pipeline itself. But the Commission cannot substitute its  
22 judgment about the benefits and potential harms if the use  
23 of natural gas for that which Congress has already defined  
24 in the Natural Gas Act itself.

25           And I think if you read my concurrence, you will

1 see I go through an indepth discussion of what the Natural  
2 Gas Act actually says, and a variety of case law that  
3 supports that interpretation.

4           But what's also interesting is, when you think  
5 about our upstream or downstream authority over natural gas,  
6 it's to not just look at what the Natural Gas Act said when  
7 it was enacted, which is very important, but what also has  
8 Congress done since it was enacted. They passed the Natural  
9 Gas Policy Act in 1978. And part of that reason was to  
10 address concerns to promote natural gas transportation in  
11 interstate commerce, basically to make sure that there was  
12 more access to natural gas for end users.

13           Then in 1989, Congress passed the Wellhead  
14 Decontrol Act, basically trying to get Congress telling the  
15 Commission that it no longer had authority over upstream  
16 production of natural gas.

17           Then if you also look at the repeal of the Fuel  
18 Use Act in which Congress--which under the Fuel Use Act,  
19 remember, Congress said you can't use natural gas, or  
20 basically restricted natural gas use for electric  
21 generation, and they repealed that.

22           These are all very important for our  
23 understanding, along with the case law, as to what our  
24 authority is to deny a pipeline based on the GHG emissions  
25 on upstream or downstream versus what our direct authority

1 is, which is certificating an actual natural gas pipeline  
2 whose purpose is to provide the public with access to  
3 natural gas, and which Congress said is in the public  
4 interest.

5           How further, we also have talked about this  
6 before and I'm not going to go into deeper detail on it, but  
7 that NEPA did not change the Natural Gas Act, and it does  
8 not give us further authority. And the Supreme Court has  
9 been clear about that.

10           Finally, my concurrence also discusses greenhouse  
11 gas mitigation, which we have also discussed in numerous  
12 previous colloquies, and so I won't elaborate further on  
13 that except to say that the Commission does have limited  
14 authority to deal with the greenhouse gas mitigation; that  
15 we have discussed before, Congress multiple times has tried  
16 to pass greenhouse gas mitigation requirements and they have  
17 been unable to do so. And, that consistent with the  
18 Supreme Court's major rules cannon, we don't have the  
19 authority to, well, everybody else does not, and while EPA,  
20 which is the agency which has the authority to regulate  
21 greenhouse gas emissions, has been unable to come up with a  
22 process, we cannot by ourselves come up with a new process  
23 and say: You know what? We've decided what's significant,  
24 and this is how we're going to mitigate it.

25           Because the Supreme Court has said Congress does

1 not hide elephants in mouse holes. So I hope you will take  
2 an opportunity to read this. And my goal in this is to  
3 provide more clarity, and to help all of us have a better  
4 understanding of what our authorities are and how to  
5 harmonize the various statutes, as well as the court  
6 decisions, and as well as to give a better understanding so  
7 we can have a continuing dialogue on how best to address  
8 these issues.

9 Thank you.

10 CHAIRMAN CHATTERJEE: Madam Secretary, we are  
11 ready to go to the consent agenda.

12 SECRETARY BOSE: Since the issuance of the  
13 Sunshine Act notice on November 14th, 2019, no items have  
14 been struck from this morning's agenda. Your Consent Agenda  
15 is as follows:

16 Electric Items: E-1, E-2, E-3, E-4, E-5, E-6,  
17 E-7, E-8, E-9, E-10, E-12, E-13, E-14, E-15, E-16, E-17,  
18 E-18, E-19, E-20, E-22, E-23, E-24, E-25, and E-26.

19 Gas Items: G-1, G-2, G-3, G-5, and G-6.

20 Hydro Items: H-1 and H-2.

21 Certificate Items: C-1, C-2, C-3, C-4, C-5, and  
22 C-6.

23 As to E-2, Commissioner McNamee is concurring  
24 with a separate statement. As to E-3, Commissioner McNamee  
25 is concurring with a separate statement. As to

1 E-4, Commissioner McNamee is concurring with a separate  
2 statement.

3 As to E-11, Commissioner Glick is dissenting in  
4 part with a separate statement. As to C-1, Commissioner  
5 Glick is dissenting with a separate statement. As to C-2,  
6 Commissioner Glick is dissenting with a separate statement.

7 As to C-3, Commissioner Glick is dissenting with a separate  
8 statement. As to C-4, Commissioner Glick is dissenting in  
9 part with a separate statement. And Commissioner McNamee is  
10 concurring with a separate statement.

11 As to C-5, Commissioner Glick is dissenting with  
12 a separate statement. And as to C-6, Commissioner Glick is  
13 dissenting with a separate statement.

14 With the exception of E-11 where a vote will be  
15 taken after the discussion and presentation of that item, we  
16 are now ready to take a vote on this morning's Consent  
17 Agenda. The vote begins with Commissioner McNamee.

18 COMMISSIONER McNAMEE: With the exception of E-2,  
19 E-3, E-4, and C-4, all of which I have a concurrence, I vote  
20 aye.

21 SECRETARY BOSE: Commissioner Glick.

22 COMMISSIONER GLICK: Noting my dissents on C-1,  
23 C-2, C-3, C-5, C-6, and my partial dissent on C-4, I vote  
24 aye.

25 SECRETARY BOSE: And Chairman Chatterjee.

1           CHAIRMAN CHATTERJEE: I vote aye.

2           SECRETARY BOSE: We are now ready to move on to  
3 the discussion and presentation items for this morning. The  
4 first presentation and discussion item for this morning is  
5 A-3 concerning the Fiscal Year 2019 Report on Enforcement.  
6 There will be a presentation by Christina Melendez from the  
7 Office of Enforcement. She is accompanied by Kurt Jacobs  
8 and John Karp from the Office of Enforcement.

9           MS. MELENDEZ: Good morning, Chairman Chatterjee  
10 and Commissioners. Today the Office of Enforcement is  
11 releasing its 13th Annual Report on Enforcement. As in  
12 previous years, OE staff prepared this Report to provide  
13 information about its activities over the last fiscal year.  
14 The Report discusses the activities performed by OE's  
15 Divisions of Investigations, Analytics and Surveillance,  
16 Audits and Accounting, and Market Oversight during the last  
17 fiscal year.

18           The Report summarizes audits, market reports,  
19 litigation filings, and settlements which were approved by  
20 the Commission. These resources are also publicly available  
21 on e-Library. OE's Report also includes discussion of  
22 non-public activities, including summaries of closed  
23 investigations and self-reports that were closed without  
24 further action by the Division of Investigations.

25           For the first time, the Report also includes

1 illustrative examples of the market monitor referrals  
2 received by OE that staff reviews and closes without opening  
3 an investigation. These summaries can be helpful to  
4 companies seeking to comply with the Commission's  
5 regulations and orders. To maintain confidentiality, the  
6 companies and individuals whose conduct was under review in  
7 these matters are not identified in these summaries.  
8 However, this year's Report provides additional details on  
9 these matters to make these summaries more useful to the  
10 regulated community and increase the transparency of OE's  
11 non-public work.

12           The Division of Audits and Accounting has  
13 included illustrative compliance alerts that cover nearly a  
14 dozen distinct areas where there have been consistent  
15 concerns or noncompliance of significant impact. New this  
16 year, the section of the Report includes citations to docket  
17 numbers relevant to the recurring, problematic compliance  
18 issues discussed in the alerts.

19           Additionally, a representative sample of audits  
20 completed in Fiscal Year 2019 summarizes staff's  
21 recommendations for corrective action and provides context  
22 for audits that resulted in refunds and recoveries.

23           The Division of Analytics and Surveillance  
24 provides a comprehensive review of its surveillance program  
25 and describes how it analyzed transactional and market data



1 in Fiscal Year 2019 to detect potential manipulation,  
2 anticompetitive behavior, and other anomalous activities in  
3 the energy markets. Additionally, this section of the  
4 Report includes greater and new details about DAS's  
5 practices and procedures related to reviewing market monitor  
6 referrals and data management.

7           The Division of Energy Market Oversight  
8 summarizes its Market Reports and Assessments and describes  
9 other measures to monitor and analyze the Nation's wholesale  
10 natural gas and electric power markets.

11           Additionally, the report describes Market  
12 Oversight's role in the administration of certain Commission  
13 filing requirements and certain public outreach conducted by  
14 the division last fiscal year. This section of the Report  
15 identifies which Commission Program Office is now  
16 responsible for each of the functions previously performed  
17 by Market Oversight following the September 2019  
18 realignment, which moved Market Oversight's functions to  
19 other Commission offices and OE divisions to improve  
20 organizational efficiency and centralize management  
21 expertise.

22           OE's enforcement priorities have remained the  
23 same as we continue to focus on four distinct areas: first,  
24 fraud and market manipulation; second, serious violations of  
25 the Reliability Standards; third, anticompetitive conduct;

1 and fourth, conduct that threatens transparency in regulated  
2 markets.

3           In Fiscal Year 2019, the Commission approved two  
4 settlement agreements between Enforcement and subjects to  
5 resolve pending investigative matters. The settlements  
6 totaled more than \$14 million, which included \$7.4 million  
7 in civil penalties and disgorgement of another \$7 million.

8           In Fiscal Year 2019, DOI staff opened 12 new  
9 investigations and brought 14 pending investigations to  
10 closure with no action. The investigations that staff  
11 closed with no action included matters in which staff found  
12 no violation, or staff found that there was not enough  
13 evidence to conclude that a violation had occurred.

14           In several other matters, DOI found a violation  
15 but exercised its discretion to not pursue a sanction and  
16 closed the investigation. DOI also closed 130 self-reports  
17 without further action, closed 10 MMU referrals without  
18 opening full investigations, and resolved 148 calls made to  
19 the Commission's Enforcement Hotline. In addition, DOI  
20 continues to litigate three cases in Federal district court  
21 on the Commission's behalf.

22           In Fiscal Year 2019, the Division of Audits and  
23 Accounting completed 11 audits of public utility and natural  
24 gas companies covering a wide array of topics. The audits  
25 resulted in 76 findings of noncompliance and 286

1 recommendations for corrective action, and directed \$161.2  
2 million in refunds and other recoveries.

3           Additionally, DAA acted through the Chief  
4 Accountant's delegated authority on 120 proceedings--sorry,  
5 120 accounting filings requesting approval of a proposed  
6 accounting treatment or financial reporting matter.

7           Among its other work, DAA advised and acted on  
8 433 proceedings at the Commission covering various  
9 accounting matters with cost-of-service rate implications.  
10 These proceedings included requests for declaratory orders,  
11 natural gas certificate applications, merger and acquisition  
12 applications, electric and natural gas rate filings,  
13 applications for issuance of securities, and accounting  
14 requests for approval. In many of these cases, DAA served  
15 in an advisory role, identifying and analyzing the  
16 accounting implication of those requests.

17           In Fiscal Year 2019, the Division of Analytics  
18 and Surveillance continued monitoring for market  
19 manipulation and other anomalous activities in the markets  
20 and identified potential investigative subjects. Natural  
21 gas surveillance screens produced approximately 7,600 screen  
22 trips which were reviewed by DAS staff, resulting in 20  
23 additional indepth inquiries into specific trading  
24 behavior.

25           On the electric side, each month during Fiscal

1 Year 2019 DAS ran and reviewed 83 electric surveillance  
2 screens, as well as monthly, hourly, and intra-hour  
3 sub-screens and reports for over 37,000 hub and pricing  
4 nodes within the six ISO/RTOs.

5 This surveillance activity identified 23  
6 instances of market behavior that required further analysis.  
7 DAS staff made a total of six surveillance-related referrals  
8 to the Division of Investigations during the last fiscal  
9 year.

10 During Fiscal Year 2019, DAS also worked with DOI  
11 on approximately 45 investigations involving allegations of  
12 manipulation in the Commission-jurisdictional natural gas  
13 and electricity markets or violation of tariff provisions.

14 In these efforts, DAS provided and data-based  
15 assessments of market activity relating to ongoing  
16 investigations; supported DOI in its fact-finding; and  
17 calculated the amount of unjust profits and market harm  
18 resulting from alleged violations to assist with  
19 determining a civil penalty recommendation under the  
20 Commission's Penalty Guidelines. DAS's work in these areas  
21 informs the structure and substance of investigative  
22 fact-finding, settlement discussions, and Commission  
23 actions.

24 Finally, during the fiscal year the Division of  
25 Energy Market Oversight continued to monitor the

1 jurisdictional markets to identify market trends, and also  
2 continued its efforts to enhance analytical capabilities  
3 related to the ongoing e-forms refresh project.

4           As in prior years, Market Oversight issued its  
5 State of the Markets Report and seasonal Market and  
6 Reliability Assessments, which reviewed trends and events in  
7 natural gas and power markets, including trends in prices,  
8 supply, and demand.

9           The State of the Market Report also reviewed the  
10 development of U.S. pipeline infrastructure and the rapid  
11 increase in the LNG export industry. Market Oversight also  
12 continued to provide its market-based rate ex post analysis  
13 which evaluates transactions against market fundamentals to  
14 identify instances of anticompetitive market outcomes.  
15 During Fiscal Year 2019, the Division also held one EQR user  
16 group meeting to conduct outreach with the filing community  
17 and to discuss potential system improvements and  
18 enhancements.

19           OE's Annual Report will be available on the  
20 Commission's website. This concludes the presentation. My  
21 colleagues and I will be happy to answer any questions you  
22 may have. Thank you.

23           CHAIRMAN CHATTERJEE: Thank you so much for  
24 preparing and presenting this thorough report. I really  
25 appreciate the work of the team here at the table, and of

1 all of the OE staff who contributed.

2           This report highlights how the Commission's  
3 enforcement program has matured, how staff has increased  
4 efforts to engage in outreach and provide transparency to  
5 industry, and how we have improved our ability to detect  
6 market anomalies early. I think this report shows that our  
7 efforts in these areas have paid off.

8           I have just a couple of questions in that vein.

9           First, it has been almost 14 years since the  
10 Commission issued its Anti-Manipulation Rule in 2006. And  
11 since that time, companies have gained more experience with  
12 compliance. Could staff please speak to recent developments  
13 or trends with respect to compliance?

14           MR. KARP: OE staff issued a white paper in  
15 November of 2016 on Effective Energy Trading Compliance  
16 Practices. In addition to the white paper, OE staff  
17 regularly conducts industry outreach to increase  
18 transparency into its surveillance program. As a result of  
19 the white paper and this outreach, staff has seen a marked  
20 improvement in market participants' compliance programs.

21           Many companies have incorporated into their  
22 compliance programs the energy trading compliance practices  
23 outlined in the white paper and other compliance measures  
24 that review activities in a manner that is similar to our  
25 surveillance screens.

1           These improvements are evident in our  
2 interactions with the market participants. It is often the  
3 case that when we reach out to market participants as a part  
4 of surveillance inquiry, their compliance staff has also  
5 flagged and reviewed the relevant activity, and they are  
6 quickly prepared with information and data to explain their  
7 conduct.

8           CHAIRMAN CHATTERJEE: Thank you. That is really,  
9 really helpful contacts and I appreciate it.

10           One last question from me. Each year the Report  
11 highlights the work of OE's Division of Audits and  
12 Accounting, which is an important part of the Commission's  
13 enforcement program and can often serve as a resource to the  
14 regulated community.

15           Could you please describe steps that DAA takes to  
16 increase transparency and encourage compliance by the  
17 industry ahead of any individual audits?

18           MR. JACOBS: Thank you for the question. DAA  
19 undertakes significant activities to increase transparency  
20 and also to enable industry participants independently to  
21 achieve compliance with the Commission's accounting  
22 regulations.

23           These activities include, among other things,  
24 first, industry outreach efforts; second, the discussion of  
25 compliance alerts that is included in each annual report on

1 enforcement; and finally, making available informal as well  
2 as formal means of obtaining advice with respect to  
3 questions about compliance with particular accounting  
4 regulations.

5           DAA is committed to increasing the efficiency,  
6 the transparency, and the effectiveness of its audit and  
7 accounting programs, and to assisting regulated entities in  
8 meeting the Commission's accounting and tariff requirements.  
9 Thank you.

10           CHAIRMAN CHATTERJEE: Thank you, very much.  
11 Commissioner Glick?

12           COMMISSIONER GLICK: Thank you, Mr. Chairman, and  
13 thank you very much for the presentation. As I often say,  
14 the Office of Enforcement I think is an unsung hero around  
15 here. We don't--usually when you get attention, it's  
16 usually negative attention; people are complaining about the  
17 office. But in actuality, you do some very, very important  
18 work, particularly keeping our markets competitive, ensuring  
19 that our markets are competitive by preventing or addressing  
20 manipulation not only on the electric side but on the  
21 natural gas side as well. So thank you for that.

22           But also in addition to the great work that you  
23 all do with regard, you are just enforcing Commission  
24 regulations. A lot of our regulated entities are required  
25 to meet the Commission's regulations. Sometimes they do,



1 sometimes they don't, and so you do a very important--  
2 perform a very important task there as well.

3 I don't have any questions, but I do want to just  
4 briefly mention, several months ago each of us received a  
5 letter from a group of Senators asking for some thoughts on  
6 market manipulation and market enforcement, and so on, and I  
7 outlined in my response three particular legislative changes  
8 that I think would be helpful to improve our authority, to  
9 improve our efforts in terms of addressing manipulation and  
10 some enforcement issues in general.

11 And I just wanted to outline them very quickly.

12 First of all, I think Congress should impose a  
13 duty of candor on everybody in terms of their interactions  
14 with the Commission. I think most regulated entities  
15 actually do have to tell the truth. They do have a duty of  
16 candor. But actually what's interesting to me, I learned  
17 this in the process, is that financial traders don't have a  
18 duty to basically tell us the truth. And we had a proposal  
19 in our Connected Entities rulemaking to address that, to  
20 essentially impose that duty as well, but unfortunately that  
21 particular rulemaking was shelved on a 2-to-1 vote.

22 So I think it is helpful if FERC is not going to  
23 do it, for Congress to impose that requirement.

24 Secondly, I think it is important for Congress to  
25 give us the authority, to the extent we don't already, and I

1 know there's a question mark as to whether we do, but to  
2 clarify that we have the authority to address recidivism in  
3 manipulators. We see in several cases, on cases that come  
4 through the Office of Enforcement, that there's entities and  
5 individual traders that engaged in manipulative acts, go to  
6 a different employer or form their own trading operation,  
7 and go on and continue to do the same thing again.

8 I know the SEC and other agencies have this  
9 authority, and I think it is very important for us to have  
10 the authority to ban entities that engage in recidivist  
11 manipulation, especially traders.

12 And third, this is something I think is important  
13 for the Commission and the Congress, as well, to clarify  
14 that when we have an enforcement proceeding, that the Office  
15 of Enforcement is recommending action on, that all the  
16 Commissioners vote. There is a question as to who has that  
17 authority right now. It appears the Chairman has the  
18 authority to terminate a proceeding on his or her own, and I  
19 think it's very important that all the Commissioners be  
20 able to vote to terminate a proceeding, or around the  
21 question to terminate a proceeding, before we actually  
22 terminate it.

23 So I think those are pretty common sense  
24 proposals. Hopefully Congress will address those at some  
25 point. But I just wanted to lay that out there, because I

1 think that would help improve our particular functioning in  
2 terms of the Office of Enforcement. So thank you very much  
3 for all the work that you do.

4 CHAIRMAN CHATTERJEE: Commissioner McNamee.

5 COMMISSIONER McNAMEE: I also want to say thank  
6 you for the hard work that everybody in the Office of  
7 Enforcement does. You read the Report, and it is amazing  
8 the amount of information, and data, and just the shear  
9 volume of work that comes through.

10 I can only say that if I were still in private  
11 practice I would have loved to have had that much work to  
12 do, and have that many billable hours--

13 (Laughter.)

14 COMMISSIONER McNAMEE: But the real point is,  
15 without making light of it, is that it is a very, very  
16 important job. And the fact that you all are able to handle  
17 so much complicated information, and process it, and help  
18 provide not just oversight, not just enforcement, but also,  
19 as you mentioned, also by providing information to the  
20 regulated entities to help them make sure they are in  
21 compliance. Because some of these things are complicated  
22 issues.

23 And I just can't say enough about what the entire  
24 team does. And somebody, I can't remember which one of you  
25 said, you all are in many ways the unsung heroes of this

1 building, though there are many unsung heroes throughout. I  
2 don't want to pick my favorites in the building. But to  
3 emphasize this, I would like you to elaborate a little bit  
4 about in the Division of analytics and Surveillance about  
5 the types of data you get, the amounts of data you get, and  
6 why it is what you do, and analyzing that data how it's used  
7 and how that helps ensure that we are doing our job as a  
8 Commission in enforcement.

9           MR. KARP: So since the creation of DAS in 2012,  
10 the Commission has been enhancing its access to public and  
11 nonpublic market data through orders, agreements, and  
12 subscription services to improve its ability to conduct  
13 surveillance of the wholesale natural gas and power markets.

14           One of the primary data sources used by DAS is  
15 Order No. 760 data, which is submitted on a daily basis by  
16 the RTOs and ISOs, and contains data on market bids, offers,  
17 and outcomes. On average, the Commission receives  
18 approximately 7 gigabytes of data each day from the six  
19 organized power markets combined.

20           DAS also has access to the e-Tags used to  
21 schedule transmission of electric power interchange  
22 transactions in jurisdictional wholesale markets. This  
23 access includes approximately 7.6 million e-Tags, and  
24 approximately 5,000 new e-Tags each day.

25           The Commission also routinely receives nonpublic

1 physical electric and natural gas market data from the  
2 Intercontinental Exchange, and a subset of the Large Trader  
3 Report data from the Commodities Futures Trading Commission.

4 DAS staff uses these nonpublic data sources,  
5 along with public data sources such as EQR filings and other  
6 subscription-based services, in a variety of ways to improve  
7 the quality of OE's work, and to minimize burden on the  
8 industry.

9 First, the analysts, economists, and data  
10 scientists in DAS feed this data into algorithmic screens,  
11 market participant activity reports, and dashboards to  
12 identify potential violations.

13 Access to this data makes it possible for DAS to  
14 evaluate what is happening in the market in near real time,  
15 identify the conduct that is truly of concern, and quickly  
16 eliminate false positives.

17 Second, DAS staff uses this data to evaluate  
18 issues raised by the market monitors and hotline callers.  
19 The internal data DAS has access to can quickly shed light  
20 on whether the issues raised by market participants--by  
21 market monitors and hotline callers warrant further  
22 investigation without having to seek additional information  
23 from market participants.

24 Third, DAS staff utilizes this data in  
25 investigations to determine whether a violation occurred,

1 and to understand relevant market conditions. Utilizing  
2 this data minimizes the burden on the subject of an  
3 investigation and the RTOs and ISOs because it reduces the  
4 amount of data sought through data requests.

5           COMMISSIONER McNAMEE: Great. I appreciate you  
6 sharing that, and I wanted to emphasize that because it is  
7 just remarkable to be able to consume that much data and be  
8 able to process it. And what a benefit it is to be able to  
9 do that in such close to real time, and the benefits it  
10 provides to the operation of the market. But as you  
11 mentioned, also to the regulated entities because it reduces  
12 down-the-road challenges that may not be necessary.

13           Thank you. Thank you for all you do.

14           SECRETARY BOSE: There is no vote on this item,  
15 so we are ready for the next presentation item. That will  
16 be Item A-4 concerning FERC Cybersecurity Focus Areas.  
17 There will be a presentation by Barry Kuehnle from the  
18 Office of Enforcement--I'm sorry, Office of Electric  
19 Reliability, I'm sorry. David Capka from the Office of  
20 Energy Projects. And Craig Barrett from the Office of  
21 Energy Infrastructure Security. There will be a PowerPoint  
22 presentation on this item.

23           MR. KUEHNLE: Good morning, Mr. Chairman and  
24 Commissioners. Thank you for the opportunity to present  
25 today on the Commission's cyber security focus areas and to

1 highlight a number of the key cyber security program  
2 priorities across the Commission.

3           Earlier this year, Chairman Chatterjee directed  
4 the Office of Electric Reliability, the Office of Energy  
5 Infrastructure Security, and the Office of Energy Projects  
6 to build on their ongoing cybersecurity efforts by  
7 identifying areas in which we may work collectively for the  
8 benefit of the Commission, consumers, and regulated  
9 entities.

10           This presentation identifies five focus areas on  
11 which Commission staff plans to strategically and  
12 collectively focus our efforts to address associated  
13 critical infrastructure risks and vulnerabilities.

14           The nature of the Commission's work has always  
15 required significant coordination among the Commission's  
16 program offices, and these five focus areas allow greater  
17 opportunity to target that coordination in ways that will  
18 have the most impact on the security of the infrastructure  
19 we oversee.

20           Staff identified these five focus areas by  
21 drawing on the experience and knowledge of each of the  
22 relevant offices to determine issues that would allow staff  
23 to address the cyber security of Commission jurisdictional  
24 facilities. Staff considered known threats, observed  
25 vulnerabilities, and potential consequences if a security

1 incident were to occur.

2 Staff's development of the five focus areas was  
3 informed by a review of public and nonpublic threat reports;  
4 a review of significant cyber security events across the  
5 globe, particularly those that impacted industrial  
6 infrastructure; the currently enforceable NERC CIP  
7 standards; and the Office of Energy Projects, Security  
8 Program for Hydropower Project Revision 3a Guidelines.

9 Staff will first briefly describe each of the  
10 five focus areas, and then we will provide an overview of a  
11 few key initiatives undertaken to address those issues.

12 MR. BARRETT: This slide identifies the five focus  
13 areas, but I stress that each issue is important in its own  
14 way and these are not listed in order of importance: Supply  
15 Chain. Insider threat. Third-party Authorized Access.

16 Each of these three categories relates to methods  
17 by which an attacker can bypass perimeter security controls.  
18 These categories are critical because compliance  
19 requirements and best security practices to secure an  
20 entity's systems are rendered of little value if an attacker  
21 can simply bypass those controls.

22 Industry Access To Timely Information on Threats  
23 and Vulnerabilities: Under this focus area, we recognize  
24 that many entities that limited threat intelligence  
25 capabilities and access to information on threats,



1 vulnerabilities, and the mitigation of risks. Improving  
2 access to that information is critical to ensuring that  
3 companies can act on relevant, time-sensitive, and  
4 well-supported information about threats and  
5 vulnerabilities.

6           Cloud/Managed Security Service Provider: This  
7 focus area acknowledges that as entities explore how to  
8 deploy cloud and managed security service providers, it is  
9 critical that they do so in a secure manner. If implemented  
10 properly, the use of a trusted third party to perform common  
11 tasks and services can yield security benefits by allowing  
12 the entity to focus on more complex issues in house and to  
13 optimize their security resources. However, more research  
14 needs to be conducted to determine if the most critical  
15 systems, such as those used for real-time operations, could  
16 be used in the cloud.

17           Adequacy of Security Controls: This focus area  
18 acknowledges that there are many assets connected to  
19 Commission jurisdictional facilities that are subject to  
20 either minimal or no mandatory cybersecurity controls. In  
21 particular, although Low Impact BES Cyber Systems, BCS, make  
22 up the majority of BES cyber assets, there are very few  
23 mandatory security controls required for these assets.

24           While Low Impact BES Cyber Systems by definition  
25 have a lower impact on the BES, the simultaneous loss or

1 degradation in a large number of these systems could have a  
2 significant aggregate effect. In addition, many Commission  
3 jurisdictional hydroelectric facilities connect to a Low  
4 Impact BCS facilities that are not subject to high levels of  
5 mandatory security controls. Likewise, natural gas  
6 pipelines are not subject to mandatory cyber security  
7 controls, but disruption of these pipelines could still have  
8 a significant impact on the BES.

9           Internal Network Monitoring and Detection: Under  
10 this focus area, we acknowledge that most cyber security  
11 efforts focus on keeping an attacker out, but once inside  
12 attackers can loiter undetected for extended periods.  
13 Internal monitoring of the protected networks is not  
14 required by the NERC CIP standards and may not always be  
15 performed in a robust manner. Lack of monitoring and  
16 detection in these networks may miss lateral movement by an  
17 attacker.

18           We will now turn to providing an overview of some  
19 key program initiatives the Commission staff is undertaking  
20 to better respond to the risks we have discussed. These  
21 initiatives are presented in three categories:

22           First, there are few internal efforts that are  
23 currently underway to better position the Commission to  
24 address emerging cyber security concerns.

25           Second, we will discuss our efforts to reach out

1 to industry and work directly with entities to promote  
2 enhanced security.

3 And finally, we will highlight a few specific  
4 priority initiatives that are being developed.

5 MR. CAPKA: The Commission's Office of Energy  
6 Projects has taken steps to meet current and future needs in  
7 its security program for jurisdictional Hydropower Projects  
8 by establishing a new security-focused group within the  
9 Division of Dam Safety and Inspections comprised of physical  
10 and cyber security specialists.

11 The formation of this new group will allow our  
12 dam safety engineers to focus on dam safety at  
13 jurisdictional projects, while the new security group will  
14 focus on physical and cyber security concerns. The new  
15 security group will be responsible for:

16 Maintaining technical expertise, mentoring and  
17 performing as team leaders for analyses and resolution of  
18 cyber and physical security issues for the Commission's Dam  
19 Safety Program;

20 Performing special security inspections, both  
21 physical and cyber, and participating as an evaluator during  
22 security exercises;

23 And conducting surveys and risk analyses to  
24 assess security needs, identifying and assessing the degree  
25 of vulnerability, and ensuring that selected protection

1 measures are implemented effectively.

2           These efforts build upon the Commission's  
3 Security Program for Hydropower Projects that was  
4 established in 2001 with cyber security guidance that became  
5 effective January 2016.

6           The Office of Electric Reliability has also  
7 recently realigned the functions of its office and has  
8 focused one of those functions exclusively on cyber  
9 security.

10           The Commission's program offices collectively  
11 work on these issues, allowing the Commission and its to  
12 work toward providing regulated entities with consistent,  
13 well-sourced information on these risks whether through, for  
14 an example, a hydroelectric dam security inspection, a  
15 compliance audit, a voluntary network assessment, or other  
16 means.

17           MR. BARRETT: Picking up on that last theme, a  
18 major focus of our efforts to promote enhanced security is  
19 to improve and build upon our existing outreach initiatives.

20           Commission staff in our Office of Energy  
21 Infrastructure Security offer voluntary network architecture  
22 assessments of electric, hydroelectric, natural gas, and  
23 liquefied natural gas facilities in collaboration with other  
24 relevant federal agencies, including DHS, TSA, and Coast  
25 Guard.

1           Commission staff also coordinates with the  
2 information sharing and analysis centers, ISACs, state  
3 regulatory commissions, and associations, industry  
4 associations, and supports relevant cybersecurity exercises  
5 to develop, improve, and distribute valuable threat,  
6 vulnerability, and mitigation information.

7           Commission staff also coordinates and  
8 participates in classified briefings in collaboration with  
9 the Department of Energy and the Office of the Director of  
10 National Intelligence that provide industry and state  
11 regulators with current threat information.

12           Commission staff also provides relevant threat  
13 and risk mitigation information during both the  
14 Commission-led CIP compliance audits and routine  
15 observations of audits performed by NERC and the Regional  
16 Entities.

17           MR. KUEHNLE: In closing, I would like to  
18 highlight a few key issues that Commission staff will be  
19 closely monitoring in light of identified focus areas.  
20 Staff will continue to monitor and to entities' supply chain  
21 security implementation and use of trusted connections.  
22 Additionally, staff will monitor entities' adoption of new  
23 technologies and services to address cyber infrastructure  
24 implementation, maintenance, and/or management.

25           These technologies and services include

1 virtualization of systems and use of cloud computing  
2 services. Staff will continue to gather information and  
3 work with regulated entities on these issues as well s  
4 potential modifications to the CIP standards such as the  
5 security controls for Low Impact BES Cyber Systems.

6 Thank you again for the opportunity to present  
7 today. The team is available to answer any of your  
8 questions.

9 CHAIRMAN CHATTERJEE: Thank you, team, for that  
10 excellent presentation. I think all of you have done an  
11 excellent job in identifying issues to focus on for the  
12 upcoming year.

13 I also appreciate that what we're seeing here  
14 today is the distillation of a lot of work and thought  
15 within the building here, so I want to thank all of you for  
16 your efforts.

17 I just have a few questions I would like to ask  
18 to clarify some of the points from the presentation.

19 I spoke earlier, and you mentioned the  
20 realignment within OER, to allow greater focus on  
21 cybersecurity. Can you talk about what prompted OEP to  
22 create a Security Group?

23 MR. CAPKA: Sure. So we've been looking at ways  
24 to improve and enhance our security program for awhile now  
25 within OEP. The security program was developed shortly

1 after 9/11 in response to the attacks, and trying to make  
2 sure our projects that we were responsible for are properly  
3 protected.

4 So the program has been enhanced over the years.  
5 You know, changes are made in consultation with other  
6 agencies and how they do their work. However, when the  
7 cybersecurity became part of the program within OEP, we had  
8 to rely heavily on the experts outside our office. So we  
9 relied on OEIS and OER to help us.

10 And it quickly became clear that we needed  
11 inhouse, within our office, expertise, especially on the  
12 cyber side. So we are looking at this as a way to help our  
13 program doubly. I think we are going to have a much more  
14 robust security program with the expertise that we have been  
15 able to bring onboard, as well as we are allowing our dam  
16 safety engineers the focus on dam safety now to where their  
17 expertise is best pointed.

18 So that is kind of what brought it about at this  
19 point.

20 CHAIRMAN CHATTERJEE: That is helpful background,  
21 thank you.

22 At our annual reliability tech conference this  
23 summer I heard a lot about cloud computing. So I was very  
24 glad to hear the team mention it in the presentation. This  
25 is obviously an evolving area, so can you share a little bit

1 more detail on the potential risks and benefits of cloud  
2 computing and how staff will be monitoring those  
3 developments?

4 MR. KUEHNLE: Yes, sir. So just like any cyber  
5 system, you could assume that there's going to be risk  
6 involved no matter how it's implemented. But specifically  
7 the cloud in virtualization, from the cloud perspective  
8 personally I believe that any risk that may be considered  
9 today probably could be overcome in some way, just like it  
10 could on your cyber system that you have inhouse. But some  
11 of those risks that I would consider would be the  
12 availability of the system itself, the compliance of the  
13 systems in the cloud. And what I mean by that is how that  
14 cloud service provider is adhering to the compliance aspects  
15 of it, because it kind of gives you an idea of how good your  
16 security posture is.

17 And also just the physical control of the systems  
18 themselves, because now since you're moving your system,  
19 extending it from your on-premise location out into the  
20 cloud, you are going to be losing control of that physical  
21 aspect of it. So you have to take that into consideration.

22 Those would be some of the key risks that I would  
23 consider.

24 Some of the benefits are elasticity of those  
25 systems, right? And what I mean by that is, with elasticity



1 as your system grows and you may need it on demand quickly,  
2 the cloud allows you to quickly provision systems in order  
3 to have that grow and meet your demands, whereas in-house  
4 you may have to build buildings, you know, purchase  
5 hardware, and it could be a timely process. Where with the  
6 cloud, you can actually do that rather quickly.

7           On top of that, you have a cost savings as well,  
8 not only with the aforementioned elasticity aspect of it,  
9 but from the cost savings perspective, it's in so many ways  
10 because now you're kind of offloading building, you're  
11 offloading hardware, things like that.

12           And probably another key benefit is just the  
13 resources itself. What I mean by that is, you have  
14 resources in-house not only on the hardware side but on the  
15 personnel side, where the personnel can now start focusing  
16 on very direct issues such as maybe like a compromise, or  
17 you know, software failures in-house, or something along  
18 those lines, where they don't have to worry about hardware  
19 failures or some aspects that maybe that the cloud may be  
20 able to manage.

21           So from a resource issue, that is actually  
22 beneficial. And I'm not saying that entities should offload  
23 their personnel, or reduce staff, but what it's doing is  
24 just allowing their staff in-house to be able to focus on  
25 things that may be more important at the time.

1           And then to the last part of your question, how  
2 are we kind of monitoring the situation? Well, we as OER,  
3 and I'm speaking specifically for the Office of Electric  
4 Reliability, what we do is we participate in standard  
5 drafting teams. We work and interact with NERC, the  
6 different trade organizations. We discuss with regional  
7 entities, and with entities themselves, and also with other  
8 government and private sector folks out there about how  
9 they're utilizing cloud not only in the electric sector but  
10 across all critical sectors and just in general.

11           So we get a really good understanding of what  
12 that security aspect looks like, the use of that cloud and  
13 how you can take advantage of those benefits while still  
14 achieving reliability of the grid.

15           CHAIRMAN CHATTERJEE: Thank you for your  
16 thoughtful, hard work on these incredibly complex evolving  
17 issues.

18           Commissioner Glick?

19           COMMISSIONER GLICK: Thank you, Mr. Chairman, and  
20 thanks to the staff for the presentation.

21           Just to start off, Mr. Chairman, you mentioned  
22 earlier and staff has talked about it, too, the  
23 reorganization. It sounds like we actually perform these  
24 functions, but you're moving into a better organization, I  
25 guess. Some of the functions to better address

1 cybersecurity, and I think that's a great idea. So I  
2 commend you for the idea, and I think it is definitely a  
3 step forward.

4 I do have one question, if you don't mind, for  
5 staff. As you all noted, the Commission will be  
6 establishing a group within the Division of Dam Safety and  
7 Inspections to work on physical and cyber security threats  
8 to dams over which FERC has authority.

9 I was wondering if we impose conditions? When  
10 we issue hydroelectric licenses, do we impose conditions on  
11 the hydro licensees to ensure that they protect their  
12 systems both from a cybersecurity perspective but also a  
13 physical safety perspective?

14 MR. CAPKA: So the way it's currently handled  
15 within the licenses that we issue are that we have standard  
16 articles which are part of those licenses that lay out the  
17 authority of the regional engineer to inspect projects over  
18 the life of the license for the purpose of ensuring the  
19 protection of life, health, and property.

20 So through that, the regional engineers do their  
21 inspections. We develop the security guidance that's  
22 available to the public and our staff to basically go  
23 through the best practices in hydro power security.

24 So we typically don't have special articles that  
25 go into the license for cyber or physical security. It's

1 handled through our normal dam safety program. However, if  
2 there was a project that came up that had unique  
3 characteristics, vulnerabilities, or things like that, we  
4 could certainly put a special article in requiring certain  
5 things.

6           COMMISSIONER GLICK: That's very helpful. I  
7 appreciate that. The reason I asked is, as the Chairman  
8 knows, we've had a number of conversations about this.  
9 We've jointly at times expressed some concern about the  
10 status of our natural gas pipeline system, in terms of  
11 whether those facilities are secure enough.

12           As a matter of fact, the Chairman and I wrote a  
13 joint op-ed on this awhile back. And I think I still have  
14 very many of those concerns. I mean, as I understand it  
15 when the GAO criticized, or issued a report criticizing some  
16 of the TSA's activities or lack thereof associated with  
17 pipeline cyber security, it noted that they only had six  
18 employees. And I've heard they actually have less than that  
19 now. And so I think that's something we need to take a  
20 look at.

21           I just want to put out there for a thought that  
22 maybe we should talk about into the future, to maybe think  
23 about with regard to our licenses or, in this case, our  
24 certificates of public convenience and necessity for natural  
25 gas pipelines, whether we should impose certain conditions

1 on those pipeline applicants in terms of cyber security and  
2 safety standards. And I just wanted to throw it out there  
3 that that may be something we should take a look at into the  
4 future.

5 So thank you very much.

6 CHAIRMAN CHATTERJEE: Commissioner McNamee?

7 COMMISSIONER McNAMEE: I also want to thank you  
8 all for your hard work and for the presentation.

9 And, Mr. Chairman, I think the creation of a  
10 separate division dealing with cyber security makes sense.  
11 It is needed, and obviously we are in a new world and it is  
12 at the top of so many people's minds right now.

13 In your presentation, in thinking about this one  
14 thing that's kind of stood out to me is, you know, being  
15 somewhat of a ludite and not really good with technology all  
16 the time, could you elaborate a little bit about your  
17 concern about lateral movements within a network? I thought  
18 that was fascinating.

19 MR. KUEHNLE: Sure. In the context of the CIP  
20 environment, we consider lateral movement movement within a  
21 trust zone. So consider maybe the CIP environment as a  
22 trust zone, if you will, where you have a very strong  
23 perimeter around that network, and you also have security  
24 being implemented within that network or that trust zone  
25 such as anti-virus, you know, intrusion detection,

1 firewalls, and those types of things on the perimeter. But  
2 what happens from a lateral movement perspective is if  
3 someone were to gain access. They kind of leapfrog that  
4 perimeter, if you will, and suppose they come in with a  
5 supply chain attack where you purchase a piece of equipment  
6 with a backdoor in it. You put that into the network. Now  
7 it is an authenticated piece of equipment. Now you have an  
8 authenticated piece of equipment that potentially may end up  
9 starting to communicate with other equipment within that  
10 network. And if that happens, if you're not monitoring  
11 appropriately, you're trusting that connection because it  
12 already is a trusted piece of equipment, so you're looking  
13 for anomalies. You're looking at some type of oddness  
14 that's going on within your network. If you're able to  
15 detect that quicker, then you're able to address any type of  
16 security concerns that you may have.

17           So that's what that lateral movement is. It's  
18 moving around within a network when you're already in a  
19 trusted zone, if you will.

20           COMMISSIONER McNAMEE: And do you think that  
21 there's more that we need to be doing in terms of trying to  
22 address this? I know you don't want to give advice, but is  
23 there more that can be done? Let me just make it simple.

24           MR. KUEHNLE: Yes.

25           (Laughter.)

1           COMMISSIONER McNAMEE: And I think we probably  
2 ought to all three consider, thank you.

3           CHAIRMAN CHATTERJEE: Madam Secretary.

4           SECRETARY BOSE: There's no vote on this item,  
5 Mr. Chairman, thank you.

6           The last item for discussion and presentation  
7 this morning is Item E-11 concerning the Draft Order  
8 Addressing the Commission's Proposed Return on Equity  
9 Methodology. There will be a presentation by Seth Quinn  
10 from the Office of the General Counsel. He is accompanied  
11 by Adam Pollock from the Office of Energy Market  
12 Regulation, Richard Howe from the Office of the General  
13 Counsel. And those are the presenters for this morning.

14          MR. QUINN: Good morning, Mr. Chairman and  
15 Commissioners. Item E-11 is a draft order that changes the  
16 Commission's methodology for analyzing the base return on  
17 equity, or ROE, component of public utility rates.

18          The draft order applies this revised base ROE  
19 methodology to two complaint proceedings involving the base  
20 ROEs of Midcontinent Independent System Operator, or MISO,  
21 transmission owners. The first proceeding is rehearing of  
22 Opinion No. 551 in which the Commission applied the base ROE  
23 methodology established for New England transmission owners  
24 in Opinion No. 531. And the second proceeding is review of  
25 an Initial Decision.

1           In *Emera Maine v. FERC*, the U.S. Court of Appeals  
2 for the D.C. Circuit remanded the Commission's decision in  
3 Opinion No. 531, finding that the Commission had neither  
4 properly demonstrated that the exiting base ROE in that  
5 proceeding was unjust and unreasonable under the first prong  
6 of section 206, nor properly justified its selection of a  
7 new base ROE under the second prong of section 206.

8           Subsequently, the Commission issued Briefing  
9 Orders in both these MISO proceedings and separate New  
10 England proceedings that were at issue in Opinion No. 531.

11           In the Briefing Order in these MISO proceedings,  
12 the Commission proposed changes to its ROE methodology to  
13 address the issues that the D.C. Circuit remanded to the  
14 Commission in *Emera Maine* and directed the parties to submit  
15 briefs addressing those proposed changes.

16           This draft order addresses those proposed changes  
17 in light of the briefs and other evidence in these  
18 proceedings. The draft order adopts the changes that were  
19 proposed in the Briefing Order, with certain revisions.

20           Principally, this draft order adopts the use of  
21 the discounted cash flow, or DCF, model and capital-asset  
22 pricing model, or CAPM, to determine utilities' cost of  
23 equity. However, the draft order rejects the Briefing  
24 Order's proposal to also use the expected earning or the  
25 risk premium models in the Commission's revised ROE



1 methodology.

2           This draft order concludes that using the DCF and  
3 CAPM models will make the Commission's ROE determinations  
4 more accurately reflect how investors make their investment  
5 decisions, while also avoiding deficiencies in other models.

6           Pursuant to the draft order, the DCF and CAPM  
7 models will be used to establish a composite zone of  
8 reasonableness. The zone of reasonableness produced by each  
9 model will be given equal weight and averaged to determine  
10 the composite zone of reasonableness.

11           The Commission will use that composite zone of  
12 reasonableness to evaluate whether an existing base ROE  
13 remains just and reasonable under the first prong of FPA  
14 section 206 and to establish a new just and reasonable base  
15 ROE under the second prong of section 206 when the existing  
16 base ROE has been shown to be unjust and unreasonable.

17           The draft order adopts the proposal in the  
18 Briefing Order to use ranges of presumptively just and  
19 reasonable ROEs in the Commission's analysis of existing  
20 ROEs under the first prong of section 206. Specifically,  
21 within the composite zone of reasonableness, the revised  
22 methodology will establish quartile ranges of presumptively  
23 just and reasonable ROEs.

24           If an existing ROE falls within the applicable  
25 quartile range based on the risk of the utility or

1 utilities, it is presumed just and reasonable. If it falls  
2 outside of the applicable quartile range, it is presumed  
3 unjust and unreasonable.

4           The range of presumptively just and reasonable  
5 ROEs for each utility or group of utilities would be based  
6 on its risk profile. For example, the range for an average  
7 risk group of utilities, like the MISO transmission owners,  
8 is the quarter of the zone of reasonableness centered on the  
9 midpoint of the zone.

10           In addition, the draft order adopts certain other  
11 changes to the Commission's ROE methodology, such as the  
12 high-end outlier test that was proposed in the Briefing  
13 Order.

14           The draft order also adopts a revised low-end  
15 outlier test that eliminates from the DCF and CAPM proxy  
16 groups any ROE results that are less than the yields of  
17 generic corporate Baa bonds plus 20 percent of the CAPM risk  
18 premium.

19           In applying the revised base ROE methodology,  
20 including the CAPM, to these proceedings, the draft order  
21 grants the complaint in the first proceeding, finding that  
22 the MISO transmissions owners' 12.38 percent base ROE is  
23 unjust and unreasonable and that a just and reasonable  
24 replacement base ROE for the MISO transmission owners is  
25 9.88 percent.

1           The draft order requires appropriate refunds  
2 based on that determination. The draft order also applies  
3 the revised base ROE methodology to the complaint in the  
4 second proceeding, which results in dismissing that  
5 complaint.

6           The draft order finds that, in order to grant  
7 relief in the second proceeding, the Commission would need  
8 to find the 9.88 percent ROE established in the first  
9 complaint proceeding to be unjust and unreasonable. The  
10 draft order finds, however, that the 9.88 percent ROE falls  
11 within the range of presumptively just and reasonable ROEs  
12 established in the second proceeding, and that the evidence  
13 in that proceeding does not rebut this presumption.

14           Therefore, the draft order dismisses the  
15 complaint in the second proceeding, does not order a  
16 prospective change to the 9.88 percent ROE, and does not  
17 require refunds in that proceeding.

18           Thank you. We are happy to answer any questions  
19 that you might have.

20           CHAIRMAN CHATTERJEE: Thank you to the team for  
21 your outstanding work on this order, and for the extremely  
22 helpful presentation. I do have a few questions for the  
23 team.

24           First, why are the DCF and the CAPM the  
25 appropriate methodologies for determining the ROE?

1           MR. POLLOCK: These two methodologies are widely  
2 used by investors and have long been employed in regulatory  
3 contexts as well. The inclusion of the CAPM, in addition to  
4 the DCF, provides additional robustness to the Commission's  
5 ROE results, and both models reflect returns required by  
6 investors based on the market data for proxy group  
7 companies.

8           CHAIRMAN CHATTERJEE: Thank you for that answer.  
9 The presentation mentioned that the order adopts a new  
10 quartile approach. What is the benefit of this new approach  
11 for determining whether existing rates are just and  
12 reasonable?

13           MR. QUINN: The D.C. Circuit found that more than  
14 one ROE may be just and reasonable under section 206 of the  
15 Federal Power Act. This order's first prong approach  
16 creates a rebuttable presumption that an existing ROE is  
17 unjust and unreasonable if it is outside the applicable  
18 quartile, or range of reasonable returns for a utility or a  
19 group of utilities with a similar risk profile.

20           It is thus responsive to the court and has the  
21 benefit of providing greater certainty to parties on the  
22 likely disposition of section 206 complaints.

23           CHAIRMAN CHATTERJEE: That is very helpful.  
24 Thank you.

25           I have one final question. Can you please

1 explain why the order grants refunds in the first complaint  
2 but does not grant refunds in the second one?

3 MR. HOWE: Section 206(b) of the Federal Power  
4 Act provides for a 15-month period beyond which the  
5 Commission cannot order refunds in any particular  
6 proceeding. In the first complaint proceeding, applying the  
7 new quartile approach the draft order finds the existing  
8 12.38 percent ROE unjust and unreasonable. The draft order  
9 then establishes a new just and reasonable ROE of 9.88  
10 percent, and requires refunds for the amounts paid in excess  
11 of the 9.88 percent for the 15-month refund period in the  
12 first proceeding.

13 Applying the quartile approach in the second  
14 complaint proceeding, the draft order concludes that the  
15 9.88 percent ROE established in the first complaint  
16 proceeding remains just and reasonable, and therefore the  
17 draft order dismisses the second complaint.

18 Requiring refunds for the 15-month refund period  
19 in the second complaint, after dismissing the complaint,  
20 would effectively extend the refund period in the first  
21 complaint proceeding to 30 months, contrary to section  
22 206(b) of the Federal Power Act.

23 And it is for that reason the draft order does  
24 not grant refunds in the second complaint proceeding.

25 CHAIRMAN CHATTERJEE: That is very helpful.

1 Thank you. And I want to thank all of you and the entire  
2 team for working on this. This is a significant action that  
3 I think will go a great deal towards providing the clarity  
4 and certainty that is needed in this complex area, and I  
5 can't thank you all enough.

6 Commissioner Glick?

7 COMMISSIONER GLICK: Thank you, Mr. Chairman.  
8 Again, thank you for the presentation, but even more of a  
9 thank you for your hard work that you put into this. It was  
10 a long time coming, and I hope that everyone here gets to  
11 read all 575 paragraphs of the order.

12 (Laughter.)

13 COMMISSIONER GLICK: You can't put it down, it's  
14 so fascinating.

15 (Laughter.)

16 COMMISSIONER GLICK: I do have one question, if  
17 you don't mind. You already explained that in the order the  
18 first step in determining whether an existing ROE is unjust  
19 and unreasonable, and you look at it essentially as a zone  
20 of reasonableness and determine whether that particular ROE  
21 is inside or outside the zone of reasonableness. But also  
22 that's, as I understand it, is a rebuttable presumption.

23 I am interested in what kind of factors will the  
24 Commission be taking a look at when other customers, or  
25 other groups come in and say that the existing ROE is unjust

1 and unreasonable, but it is within that zone? What kind of  
2 factors will you take a look at to assess whether that ROE  
3 is--whether the ROE is not actually in the--unjust and  
4 unreasonable even though it's within the zone?

5 MR. POLLOCK: The Commission could consider any  
6 evidence that parties can demonstrate is relevant, such as  
7 the relative location of the existing ROE within the  
8 presumptively just and reasonable range; evidence regarding  
9 non-utility stock prices; investor expectations for  
10 non-utility stocks; various types of bond yields and their  
11 relation to stock prices; investor and other expert  
12 testimony; state ROEs; and testimony regarding the effects  
13 of rates on customers.

14 COMMISSIONER GLICK: I appreciate that.

15 Mr. Chairman, as you mentioned, I agree with you,  
16 I think this is a very good order, for the most part, and  
17 I'm going to get in a second to the one area of  
18 disagreement, but I really appreciate you working  
19 collaboratively in getting this out. This has been a long  
20 time coming. This proceeding has been going on for awhile.  
21 I think it is incumbent upon us to create more certainty for  
22 all stakeholders, not just the transmission owners but also  
23 customers and other entities out there that care a lot about  
24 this. So hopefully we're going to be doing some of that  
25 today. And I think we're going to hopefully provide some

1 more clarity.

2 I do, as I mentioned before, I do agree with much  
3 of the order. There is one area, and Mr. Howe kind of made  
4 that point in response to the Chairman. But I want to point  
5 out where I disagree with that particular call. And that's  
6 the call to deny refunds for the second complaint  
7 proceeding. And this is a little bit complicated, but so we  
8 had a situation where there was a complaint. And at the  
9 time the complaint was filed, the ROE for the MISO  
10 transmission owners was 12.38 percent.

11 And then the Commission set that case for hearing  
12 and established a refund effective date. And as we know, by  
13 law the refund effective date concludes after 15 months.

14 So at the end of the 15 months, as is permitted  
15 by the law, the complainants filed a second complaint. And  
16 in that particular case the Commission also said that  
17 there's a potential that ROE is unjust and unreasonable, so  
18 we're going to establish a--set it for a hearing, but also  
19 establish a second 15-month refund date. So then in this  
20 particular case the order that we have today, the  
21 Commission is saying the 12.38 percent ROE that was paid in  
22 the first complaint was unjust and unreasonable so therefore  
23 we're going to set the complaint--we're going to set the  
24 ROE, the just and reasonable rate, at 9.88 percent. And  
25 we're going to refund for that 15-month period, which I



1 think is maybe \$100 million, maybe a little less, but a lot  
2 of money to consumers.

3           But then we're making--we're cutting some sort of  
4 a legal fiction or a regulatory fiction in this case. We're  
5 saying, well, since we set the 9.88 percent ROE in the first  
6 proceeding, we're going to assume that that was the  
7 effective rate in the second complaint proceeding--but it  
8 wasn't.

9           In fact, it was actually--it is still 12.38  
10 percent. So in a sense we are denying consumers--we're  
11 saying consumers paid more than, maybe approximately \$100  
12 million more than they should have, but we're going to  
13 ignore that. We're just going to assume that they were  
14 really paying the effective rate of 9.88 percent, which  
15 again is just not true.

16           Now you could argue whether--and, you know, I  
17 think reasonable minds can argue whether, what the Federal  
18 Power Act means, but I think to say that we'd be in effect  
19 creating a 30-month refund effective date just isn't the  
20 case.

21           The fact is, the law, section 206(b) I think in  
22 this particular case, says it's a 15-month effective date.  
23 And then when you have another complaint, you have another  
24 15-month effective date, which is what we had. So I have  
25 some concerns. I know that the Commission has an overall

1 concern about pancake complaints, and I understand that. I  
2 actually share a lot of those concerns. I'm not entirely  
3 sure pancake complaints are great from a policy perspective.  
4 But as we had a discussion earlier when it came to climate  
5 change, the fact is it's not the law that we want, it's the  
6 law that we have is what we have to administer.

7           And to me, 206(b) is plainly clear that if the  
8 rate is unjust and unreasonable, we have the ability to  
9 assess or to require refunds for the second complaint  
10 period, as well.

11           So that is what I will be partially dissenting  
12 upon today. Thank you, Mr. Chairman.

13           CHAIRMAN CHATTERJEE: Commissioner McNamee?

14           COMMISSIONER McNAMEE: I also want to thank you  
15 all for the hard work in this case, and for all the parties  
16 that filed information in this case to try and guide us in  
17 understanding and making a decision about how we should set  
18 ROE.

19           And, you know, as we all know, especially, you  
20 know, with the many cases where you sit there and you listen  
21 to experts debating what is the right proxy group, how do we  
22 figure out what the ROE is, this is a very hard issue. And  
23 it is one that has to be dealt with in all these cases.

24           But I want to step back and just talk about how  
25 important this concept is in regulated utilities. I mean

1 the whole idea that we establish a return on equity is  
2 because we are trying to have a system where we have  
3 identified that there public utilities because there's a  
4 public benefit, a public interest use to certain facilities  
5 that, you know, they're imbued with the public interest;  
6 that therefore government somehow can regulate private  
7 industry.

8           But in doing that, the Supreme Court has made it  
9 clear, we've got to make sure that investors get a  
10 reasonable return on their investment--not guarantee the  
11 return, obviously, but it's an opportunity for that return.  
12 And setting an ROE is so important to making sure that this  
13 system works, not just as a practical matter, which is  
14 vitally important, but as a constitutional matter.

15           And so, you know, as we go through this, we look  
16 at the edges, in the weeds, you look at all the pleadings,  
17 you deal with all the issues that are so very important from  
18 a practical aspect of setting ROE, but what I really like  
19 doing with this case is the fact that we're dealing with  
20 something that goes to the very basis of what it is that  
21 this Commission was created to do, what the state  
22 commissions do in regulating public utilities, and I just  
23 want to thank you all. And all the people and interested  
24 parties that filed in this case to help guide us in this.  
25 Thank you.

1 CHAIRMAN CHATTERJEE: Madam Secretary.

2 SECRETARY BOSE: We are now ready to take a vote  
3 on this item, and the vote begins with Commissioner McNamee.

4 COMMISSIONER McNAMEE: I vote aye.

5 SECRETARY BOSE: Commissioner Glick.

6 COMMISSIONER GLICK: I dissent in part.

7 SECRETARY BOSE: And Chairman Chatterjee.

8 CHAIRMAN CHATTERJEE: I vote aye.

9 SECRETARY BOSE: There are no further matters  
10 before the Commission--agenda matters.

11 CHAIRMAN CHATTERJEE: Thank you, Madam Secretary.

12

13 Before we close, I'd first like to congratulate  
14 the Washington Nationals on their historic World Series win.  
15 They made Washington the District of Champions, and gave us  
16 a series we won't soon forget. Had I carried on  
17 Commissioner LaFleur's tradition of wearing jerseys, I would  
18 be wearing my Juan Soto 22, but I feel like that tradition  
19 ought to retire with Commissioner LaFleur.

20 (Laughter.)

21 CHAIRMAN CHATTERJEE: I would also like to  
22 recognize Michael Porter, the son of our Executive Director,  
23 Anton Porter, who plays cornerback for Fairmont State  
24 University in Fairmont, West Virginia, and who just finished  
25 his senior year. Michael is a three-year starter, and he

1 was just named First Team All Mountain East Conference for  
2 this season, his senior season.

3 My heartfelt congratulations to Anton and Michael  
4 for this outstanding accomplishment and for an outstanding  
5 college football career. Michael was also named First Team  
6 All-Conference after his sophomore and junior seasons, and  
7 named Honorable Mention All-America after his sophomore  
8 season. I want to wish him well in his future and hope to  
9 see him play on Sundays next year. The Patriots can always  
10 use a great cornerback.

11 (Laughter.)

12 CHAIRMAN CHATTERJEE: Finally, I'd like to  
13 recognize Richard (Dick) O'Neill, and present him with the  
14 Chairman's Exemplar of Public Service Award. Dick began his  
15 FERC career in 1986, and in his 30-plus years here he has  
16 been an invaluable part of the FERC family.

17 Dick has worn many hats in his FERC career. He  
18 served as the Director of FERC's Office of Pipeline and  
19 Producer Regulation from 1986 to 1988; as the Director of  
20 FERC's Office of Economic Policy from 1988 to 2000; and as  
21 the Commission's Chief Economic Advisor in the Office of  
22 Market, Tariffs and Rates, which then became the Office of  
23 Energy Market Regulation, from 2000 to 2010. He currently  
24 serves as the Commission's Chief Economic Advisor in the  
25 Office of Energy Policy and Innovation.

1           Dick has been at the forefront of FERC's work on  
2 many of the major issues facing the energy industry over the  
3 years, including open access, restructuring, competition,  
4 performance-based benchmarked incentive regulation, market  
5 power mitigation, and market design.

6           He also was a steady hand helping to guide FERC's  
7 regulation of the natural gas industry. From 1978 to 1986,  
8 he directed oil and gas analysis which covered everything  
9 from the development of software systems, to oil and gas  
10 resource analysis, to energy modeling systems, to oil and  
11 gas forecasting at the Energy Information Administration.

12           Over his long and storied career, Dick has  
13 published numerous articles on complex regulatory issues.

14           Dick currently leads FERC's efforts on software  
15 efficiency, helping to identify opportunities for public  
16 utilities, particularly RTOs and ISOs, to consider the  
17 deployment of new modeling software to enhance the  
18 efficiency of their market operations.

19           Over the years, Dick's work on software  
20 efficiency has led to the adoption of policies and programs  
21 that have saved billions of dollars annually--with the  
22 potential for even more savings into the future.

23           He also has served as a mentor and a resource for  
24 many here at 888. He's always eager to discuss energy  
25 regulatory issues with staff and external audiences--really,

1 anyone who's interested--

2 (Laughter.)

3 CHAIRMAN CHATTERJEE: --sharing his extensive  
4 knowledge and enthusiasm.

5 Dick has been a great asset to FERC. We are  
6 losing a wealth of institution--and substantive--knowledge,  
7 and he will be greatly missed. That said, I am pleased to  
8 say that our loss will be DOE's gain, and Dick will continue  
9 to serve the country in a new role.

10 Please join me in congratulating Dick on his new  
11 position at DOE's Advanced Research Projects Agency-Energy,  
12 called ARPA-E, which he will start at the end of this month.  
13 He'll be continuing his work on RTO software in this new  
14 role, so his contributions to improving the markets will  
15 continue, which is good news for us all.

16 Before I invite Dick to accept this award, I  
17 would like to turn it over to my colleagues for any comments  
18 that they may have.

19 COMMISSIONER GLICK: I too want to congratulate  
20 Dick, and also not only for the stellar service and the  
21 award that you're getting today, but also for on the new  
22 position at the Department of Energy.

23 The Chairman mentioned already that you've been  
24 leading the efforts on software efficiency, and I just want  
25 to be a little more specific. As I understand, I've been

1 told, that you helped introduced mixed integer software,  
2 which all of us understand so I'm not going to explain it.

3 (Laughter.)

4 COMMISSIONER GLICK: But it saved \$5 billion a  
5 year. That's amazing! One person is responsible for \$5  
6 billion a year in saving. You get an award just for that.

7 (Laughter.)

8 CHAIRMAN CHATTERJEE: No refund!

9 (Laughter.)

10 COMMISSIONER GLICK: Only after 15 months. But  
11 Dick, as everyone knows, has been a thought leader here at  
12 the Commission, as the Chairman mentioned, but he also has a  
13 reputation for challenging the status quo, which I think is  
14 a very good thing and I appreciate you doing that.

15 But you are going to be sorely missed here, but  
16 congratulations again and I look forward to seeing you in  
17 your new role. So thank you, very much.

18 COMMISSIONER McNAMEE: Once again,  
19 congratulations and thank you for your service here at FERC,  
20 and to the country. And as Commissioner Glick said, just  
21 for thinking outside the box, and your innovation, and your  
22 ability to help us along. There's a lot of problems that  
23 maybe we need fixed in government, and we may send you in  
24 some other areas and deploy you, but I am happy, personally,  
25 that you're going to the Department of Energy, obviously a



1 place that I know Commissioner Glick and I both served in,  
2 and we know what a great institution it is. Knowing some of  
3 the folks over at ARPA-E, you are going to be with a number  
4 of really great people and some great opportunities, and I'm  
5 sure you're going to be successful and help them be  
6 successful. So, thank you,

7 (Presentations made.)

8 CHAIRMAN CHATTERJEE: Congratulations again to  
9 Dick. We have covered a lot of ground today, and I really  
10 appreciate all of the hard work, and particularly all of the  
11 presentations. I think this meeting really showcases the  
12 important work that we do here at the Commission, like the  
13 work of OE. And again, I want to personally thank the  
14 entire team for their work on today's Report. It really  
15 highlighted all of our Enforcement staff's contributions,  
16 and I want to thank you all for that.

17 Again, I am particularly pleased with the work  
18 that was done on ROE, and I echo the comments of my  
19 colleagues on what a significant undertaking this was. And  
20 I think the fact that we were able to achieve consensus on  
21 it will go a great way to providing certainty. And it's  
22 just so, so important.

23 So once again, thank you all. Everyone please  
24 have a wonderful Thanksgiving. And with that, we will  
25 conclude the meeting.

1                   (Whereupon, at 12:02 p.m., Thursday, November 21,  
2 2019, the meeting of the Commissioners of the United States  
3 Federal Energy Regulatory Commission was adjourned.)

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

## 1 CERTIFICATE OF OFFICIAL REPORTER

2

3 This is to certify that the attached proceeding

4 before the FEDERAL ENERGY REGULATORY COMMISSION in the

5 Matter of:

6 Name of Proceeding:

7 1061st Commission Meeting

8

9

10

11

12

13

14 Docket No.:

15 Place: Washington, DC

16 Date: Thursday, November 21, 2019

17 were held as herein appears, and that this is the original

18 transcript thereof for the file of the Federal Energy

19 Regulatory Commission, and is a full correct transcription

20 of the proceedings.

21

22

23 Larry Flowers

24 Official Reporter

25