

U.S. DEPARTMENT OF TRANSPORTATION

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PIPELINE AND HAZARDOUS MATERIALS  
SAFETY ADMINISTRATION

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GAS PIPELINE ADVISORY COMMITTEE

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MONDAY  
MARCH 25, 2024

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The Advisory Committee met at the  
Westin Hotel, 1800 Richmond Highway, Arlington,  
Virginia, at 8:30 a.m. EDT, David Danner,  
Chair, presiding.

PRESENT

DAVID DANNER, Chair, Washington Utilities and  
Transportation Commission

SAMUEL T. ARIARATNAM, Arizona State University

DIANE BURMAN, New York State Public Service  
Commission

PETER A. CHACE, Public Utilities Commission of  
Ohio

J. ANDREW DRAKE, Enbridge Gas Transmission and  
Midstream

WILLIAM (CHAD) GILBERT, United Association  
International

SARA ROLLET GOSMAN, University of Arkansas Law  
School

SARA W. LONGAN, U.S. Army Corps of Engineers

ERIN MURPHY, Environmental Defense Fund

ARVIND P. RAVIKUMAR, The University of Texas at  
Austin

STEVE SQUIBB, City Utilities of Springfield,  
Missouri  
TERRY L. TURPIN, Federal Energy Regulatory  
Commission  
BRIAN R. WEISKER, Duke Energy Natural Gas  
Business Unit  
CHAD J. ZAMARIN, The Williams Companies, Inc.

STAFF PRESENT

ALAN MAYBERRY, Associate Administrator  
CLAYTON BODELL, General Engineer  
LAUREN CLEGG, Deputy Assistant Chief Counsel  
JOHN GALE, Director  
ROBERT JAGGER, Senior Transportation Specialist  
MARK JOHNSON, Senior Economist  
JOSEPH KLESIN, Project Manager  
SAYLER PALABRICA, Transportation Specialist  
ROBERT ROSS, Assistant Chief Counsel  
CAMERON SATTERTHWAITE, Supervisory  
Transportation  
Specialist  
RODRICK SEELEY, National Safety Coordinator  
ANNA SETZER, Transportation Specialist  
ERMIAS WELDEMICAEL, Director

PUBLIC COMMENTERS

BILL CARAM, Pipeline Safety Trust  
ANN JAWORSKI, Earthjustice  
MAURY JOHNSON, Public  
BEN KOCHMAN, INGAA  
KEVIN LANG, Southwest Gas Corporation  
RICHARD LONN, Southern Company Gas  
DARON MOORE, Air Liquide  
ANNETTE SAXMAN, National Grid  
ERIC TAYLOR, BHE  
CHRIS WILLIAMS, Cheniere Energy  
RON WILLS, Air Products  
MIKE ZANDAROSKI, CenterPoint Energy

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

2 (8:30 a.m.)

3 MR. SATTERTHWAITE: Can everybody  
4 please take your seats? Thank you.

5 MR. MAYBERRY: Good morning. Wow,  
6 this is very good. Well, thank you for  
7 attending this meeting of the Gas Pipeline  
8 Advisory Committee meeting. Thank you for  
9 traveling to Washington, D.C., area. It's a  
10 wonderful time to be here. If you haven't seen  
11 already, the cherry blossoms are out in full  
12 force. So hopefully you'll get some time to be  
13 out there to see the cherry blossoms.

14 My name is Alan Mayberry, and I'm  
15 the Associate Administrator for Pipeline Safety  
16 at PHMSA. And pursuant to the Federal Advisory  
17 Committee Act, I'm the designated federal  
18 official for GPAC and will serve as the  
19 presiding official for this meeting. Our  
20 chairperson for this meeting will be the  
21 Honorable David Danner, who is the chair for  
22 the Washington Utilities and Transportation

1 Commission. Today I bring best wishes from  
2 Tristan Brown, our Deputy Administrator. He  
3 will not be attending up front today, but he  
4 does send his best wishes for a productive  
5 meeting this week.

6 I'll go through a brief safety  
7 moment. If we have a fire alarm, the exits are  
8 located to my right, the door to my right. Any  
9 of these doors, you see, they're clearly marked  
10 Exit. You can turn left and go down some  
11 stairs at a door that goes at the end of that  
12 corridor. If you're in the back of the room,  
13 you can exit and turn right. And then there's  
14 an exit to the left as you go down that  
15 corridor. And that goes to the downstairs and  
16 to the outside. You can also go out to these  
17 doors to my left, go down the stairs. Perhaps,  
18 there you came up from the lobby. Or you can  
19 go to the right. There's an exit that goes  
20 downstairs and outside as well. And in any  
21 event, once you do reach outside, the muster  
22 point for the hotel is the parking lot across

1 the street to my left, the front of the hotel  
2 in the parking lot across the street. So  
3 that's our safety minute.

4 Before we get started, I'll go over  
5 a few housekeeping items to help ensure the  
6 meeting runs smoothly. If you're not  
7 presenting or speaking, please mute your  
8 microphone to minimize disruptions. If  
9 necessary, take a moment now to check that you  
10 are muted. We ask that you hold any comments  
11 until we open the floor for discussion. For  
12 members of the public, when you are  
13 acknowledged, please identify yourself and  
14 limit your comments to two minutes or less. If  
15 necessary, the chairperson may ask you to cut  
16 your comments short to keep the agenda moving.

17 You can submit written comments  
18 under the Advisory Committee, Docket number  
19 PHMSA, that's P-H-M-S-A-2024-0005. And  
20 comments should be submitted by April 29th,  
21 2024. The transcript of the meeting will be  
22 available to the public in the meeting docket

1 in the PHMSA meeting page two or three weeks  
2 after the meeting. In addition, today, PHMSA  
3 is providing a Zoom link on the meeting webpage  
4 for the public to listen to the meeting.  
5 Please note that attendees who participate via  
6 Zoom do not have the opportunity to provide  
7 comments during the meeting.

8 And then lastly, in order to  
9 maintain order in decorum and the schedule  
10 throughout the meeting, we ask that both  
11 Committee members and members of the public  
12 adhere to these basic rules. These are pretty  
13 basic: Please do not delay or disrupt the  
14 meeting, whether by conversing separately  
15 during proceedings or by causing other  
16 distractions. Do not interrupt speakers or  
17 presenters. Please follow the instructions of  
18 the chairperson and the presiding officer. And  
19 please note that anyone who disrupts the  
20 meeting will be asked to leave the meeting  
21 room. That concludes our housekeeping items.

22 I will now hand the meeting over to

1 Chairman Danner. Chairman Danner? Thank you.

2 MR. DANNER: All right. Thank you  
3 very much, Alan.

4 Hi, everyone. Good morning. My  
5 name is Dave Danner. I'm the Chair of the  
6 Washington Utilities and Transportation  
7 Commission, and I will serve as chairperson of  
8 this meeting. And I hereby call this meeting  
9 of the Gas Pipeline Advisory Committee to  
10 order. This meeting is being recorded, and  
11 transcript will be produced for the record. As  
12 Alan said, the transcripts and presentations  
13 will be available in the meeting page of the  
14 PHMSA website, and the docket number for this  
15 meeting is PHMSA-2024-0005.

16 Before we get started, a few  
17 reminders to members, presenters, and the  
18 public. Remember to introduce yourself each  
19 time you speak so that your comments are  
20 properly recorded in the transcript for the  
21 meeting. And additionally, members should set  
22 their tent cards on their sides to alert us

1       that they wish to make a comment. And now  
2       we'll take an opportunity to conduct a roll  
3       call.

4               So, Cameron Satterthwaite, would you  
5       take the role?

6               MR. SATTERTHWAITE: Okay. This is  
7       Cameron Satterthwaite. When I say your name,  
8       just say, here, and we'll go right through.

9               Diane Burman?

10              MS. BURMAN: Here.

11              MR. SATTERTHWAITE: Peter Chace?

12              MR. CHACE: Here.

13              MR. SATTERTHWAITE: David Danner?

14              MR. DANNER: Here.

15              MR. SATTERTHWAITE: Sara Longan?

16              MS. LONGAN: Here.

17              MR. SATTERTHWAITE: Terry Turpin?

18              MR. TURPIN: Here.

19              MR. SATTERTHWAITE: Brian Weisker?

20              MR. WEISKER: Here.

21              MR. SATTERTHWAITE: Andrew Drake?

22              MR. DRAKE: Here.

1 MR. SATTERTHWAITE: Alex Dewar?

2 Steve Squibb?

3 MR. SQUIBB: Here.

4 MR. SATTERTHWAITE: Chad Zamarin?

5 MR. ZAMARIN: Here.

6 MR. SATTERTHWAITE: Chad Gilbert?

7 MR. GILBERT: Here.

8 MR. SATTERTHWAITE: Arvind

9 Ravikumar?

10 MR. RAVIKUMAR: Here.

11 MR. SATTERTHWAITE: Erin Murphy?

12 MS. MURPHY: Here.

13 MR. SATTERTHWAITE: Sara Gosman?

14 MS. GOSMAN: Here.

15 MR. SATTERTHWAITE: Sam Ariaratnam?

16 MR. ARIARATNAM: Here.

17 MR. SATTERTHWAITE: All right. We

18 have a quorum. Thank you.

19 MR. DANNER: All right. Thank you

20 very much.

21 I'll now turn it back to Alan.

22 MR. MAYBERRY: Thank you, Dave.

1           As you know, planning these meetings  
2       takes an immense amount of coordination. And  
3       I'm happy to recognize the amazing PHMSA A-team  
4       in our Standards and Rulemaking division that  
5       is responsible for putting this meeting  
6       together today: Mr. Massoud Tahamtani, John  
7       Gale, Cameron Satterthwaite, Amal Deria, Janice  
8       Morgan, Michelle Tillman, Maria Alvarez  
9       Carroll, who's out at our front desk here as  
10      well as Janice, Jenny Donohue, Robert Jagger,  
11      Sayler Palabrica, Anna Setzer, Briana Wilson,  
12      and Tewabe Asebe. So thank you very much PHMSA  
13      team for your hard work.

14           And with that, I will turn it back  
15      to you, Dave.

16           MR. DANNER: Let's see. Could you  
17      turn it?

18           All right. So where we left off  
19      several Fridays ago, we were working still on  
20      the leak detection and repair, NPRM.

21           I think what I would like to do now  
22      is turn it over to John, and let's just see if

1 we can pick up where we left off.

2 MR. GALE: Thank you, Chairman  
3 Danner.

4 Good morning, members. Good  
5 morning, public. My name is John Gale. I'm  
6 director of Standards and Rulemaking at the  
7 Office of Pipeline Safety. And welcome to  
8 Groundhog Day. Yeah. So what I'm going to do  
9 is give you some introductory remarks, set the  
10 stage where we're at, and then we'll get into  
11 our first item there under gas gathering.

12 So, Anna, if you could just go ahead  
13 and move forward two slides, I believe it is,  
14 maybe three. One more. Okay. Great. Thank  
15 you.

16 Just again, just kind of set the  
17 stage. On May 18th of 2023, PHMSA published in  
18 the Federal Register a Notice of Proposed  
19 Rulemaking to reduce methane emissions from new  
20 and existing gas pipelines. This rulemaking  
21 responds to congressional mandates in the PIPES  
22 Act of 2020, plays a critical role in the U.S.

1 Methane Emissions Reduction Action Plan by  
2 eliminating 0.5 to 1 million cubic metric tons  
3 of methane emissions annually, obliging  
4 operators of all Part 192 regulated gas  
5 pipelines to develop and implement advanced  
6 leak detection programs for detecting, grading,  
7 and repair on prescribed schedules of all leaks  
8 greater than or equal to 5 ppm. And just to be  
9 clear, that's just a summary of the proposal,  
10 knowing that we've already addressed some of  
11 those issues in the committee. It also  
12 enhances leak reporting requirements for gas  
13 distribution, gas gathering, gas transmission,  
14 underground natural gas storage facilities, and  
15 LNG facilities.

16 Of course, as we all know, a GPAC  
17 meeting was held November 27th, 2023, to  
18 December 1st, 2023. And at that meeting, this  
19 Committee completed its work on several issues  
20 related to operation, maintenance, and venting,  
21 leak surveys and patrol frequencies, advanced  
22 leak detection program elements and performance

1 standard, and leak grading and repair. The  
2 purpose of this meeting is for the committee to  
3 complete its work on the LDAR NPRM, and  
4 following completion of its work on the LDAR  
5 NPRM, we'll ask the committee to take up the  
6 Class Location NPRM as time permits.

7 So real quick, this is just again,  
8 the work you guys have completed and what work  
9 needs to still be done. As I just mentioned,  
10 we've already completed the work, and we had a  
11 vote and a vote passed on operations and  
12 maintenance and venting, leak surveys and  
13 patrols, advanced leak detection program  
14 elements and performance standards, and leak  
15 grading repair. As you all remember on Friday,  
16 we discussed gathering for quite a bit of time,  
17 but we ended up deferring the vote.

18 We still need to discuss reporting  
19 requirements that are in the NPRM LNG and  
20 hydrogen, which we've grouped together,  
21 compliance, deadlines, and operator  
22 qualification, kind of, and miscellaneous

1 issues at the end. And of course, then, at the  
2 very end, we always have the committee vote on  
3 the report itself. So what we've done is to  
4 try to help, you know, move us forward a little  
5 bit to set us on a time schedule because we  
6 were hopeful that last time we were going to  
7 get through it all; obviously, that we needed  
8 more time. But we believe, you know, if we can  
9 move forward and complete our work on gathering  
10 by Monday, that's going to really set the stage  
11 to complete the rest of the week, right? So  
12 the idea here, and again, you know, this can be  
13 flexible. Who knows? Maybe we finish  
14 gathering early. I can be optimistic, you  
15 know, and we can get into reporting even today.

16 But the general idea is to have gas  
17 gathering on Monday, Tuesday would be reporting  
18 LNG and hydrogen, and then on Wednesday,  
19 complete our work on compliance deadlines, et  
20 cetera, committee report, et cetera, and then  
21 Thursday morning, take up class location. And  
22 again, as we're saying, you know, if we finish

1 early on Wednesday on LDAR, it doesn't mean  
2 we're not going to jump into class location.  
3 We will do that, you know, but we just want to  
4 try to set the stage so that we can finish the  
5 work, finish both of these projects by the end  
6 of the week. So hopefully that's an acceptable  
7 plan.

8 Moving on. We do have a couple  
9 slides that Mark Johnson real quick is going to  
10 cover for us on some RIA information that he  
11 would like to share.

12 With that being said, Chairman, I  
13 would like to turn it over to Mark.

14 Mark?

15 MR. JOHNSON: Hello. My name is  
16 Mark Johnson. I'm an economist with PHMSA. As  
17 most of you are probably aware, EPA has  
18 recently finalized new social cost of  
19 greenhouse gas figures. And in addition, OMB  
20 has provided new guidance on how agencies  
21 should conduct regulatory analysis, including  
22 recommending the use of a 2 percent discount

1 rate for rules with climate change components.

2 This slide and the next one present  
3 estimated cost and benefits as assessed in the  
4 Preliminary Regulatory Impact Analysis that  
5 accompanied the NPRM. The only changes are we  
6 have used a 2 percent discount rate and used  
7 the EPA's new figures for the social cost of  
8 methane. And as you can see, if you compare  
9 these figures to the PRIA that we published,  
10 the new discount rate changed things on the  
11 cost side very minimally. I think it's only  
12 about \$5 million difference in the total cost  
13 to the rule. And I won't go into too much  
14 detail on these figures, and we can just move  
15 on to the next slide.

16 And this presents benefits using the  
17 new EPA figures for the social cost of methane  
18 and evaluated a 2 percent discount rate.  
19 Again, everything else was the same as we  
20 evaluated the rule in the published PRIA, and  
21 there's a little bit more substantial change  
22 here. There are about \$300 million or higher.

1       So the benefits did increase modestly given in  
2       the context of the rule.

3               Next slide. Oh, I guess that's it.  
4       So anyway, the basic upshot is that, you know,  
5       we would've drawn the same conclusions as we  
6       did at the NPRM stage, that the rule has  
7       positive net benefits given this new guidance  
8       and these new figures on the social cost of  
9       greenhouse gases. Thank you.

10              MR. DANNER: All right. Thank you.  
11       John?

12              MR. GALE: Thank you, Chairman.

13              So, members, the next topic we're  
14       going to get into is really a continuation, is  
15       gathering. We're not going to go through the  
16       whole slide deck. I'm sure you're quite  
17       pleased with that, but we are just going to  
18       give a few introductory slides to kind of set  
19       the stage again for gathering, continue the  
20       dialogue on gathering. We have what we believe  
21       were the vote discussion slides at the time the  
22       meeting concluded on that Friday, and I believe

1 some of the members have some slides they also  
2 want to share. So we'll put those up as well.

3 And with that being said, I'm going  
4 to turn it over to Sayler, who will continue  
5 our dialogue on gathering. Sayler?

6 MR. PALABRICA: Thank you, John.

7 So just to recap the proposed rule  
8 as it applies to gas gathering. So at the  
9 previous meeting, the GPAC completed the  
10 briefing and summarized the NPRM in public  
11 comments on the gas gathering rule. Like John  
12 said, we're not going to be repeating that, but  
13 we've provided some additional information on  
14 gas gathering infrastructure, both estimated  
15 from the Preliminary RIA, as well as annual  
16 reports received since the publication of the  
17 NPRM.

18 And again, just to recap the  
19 proposal, Type A, B, C, and offshore regulated  
20 gas gathering lines would've been subject to  
21 the proposed leak survey, patrol leak grading,  
22 repair, and ALDP requirements applicable to

1 transmission lines. And then the leakage  
2 survey and repair requirements would apply to  
3 all Type C gathering lines. And currently,  
4 they're under the Paragraph F exception of  
5 1929. Additionally, we propose to require  
6 procedure manuals for Type B and C regulated  
7 gas gathering lines and propose to require Type  
8 A, Type B, and Type C regulated onshore  
9 gathering lines to participate in the National  
10 Pipeline Mapping System.

11 The next slide is just a summary of  
12 the regulatory classifications for gathering  
13 lines. I know that one of the members is going  
14 to go into this as well, so I'll stay brief.  
15 So offshore gathering lines are subject to  
16 basically transmission line requirements, and  
17 that applies to any offshore gathering. And  
18 then Type A and Type B are gathering lines in  
19 Class 2, 3, and 4 locations, with Type A  
20 operating at relatively high pressure and Type  
21 B operating at relatively low pressure and  
22 simplifying high pressure. But that means MAOP

1 producing a hoop stress of 20 percent or more  
2 of SMYS or non-metallic with an MAOP greater  
3 than 125 PSI. Or for Type C and the stress  
4 level is unknown, MAOP is greater than 125 PSI  
5 or operating pressure. And then Type C, which  
6 is the new classification from the Safety of  
7 Gas Gathering line final rule, are those high-  
8 pressure lines with a diameter greater than  
9 8.625 inches. And then finally, Type R is all  
10 other gathering lines, and those are not  
11 classified as regulated onshore gathering lines  
12 for the purposes of Part 192.

13 So for the number of operators in  
14 the NPRM, the PRIA estimated 378 impacted  
15 operators on the assumption that Type C  
16 operators also operate Type A and B gathering  
17 lines. And we also performed a sensitivity  
18 analysis estimating a large number of  
19 additional Type C gathering lines based on  
20 comments that we received on the original  
21 Safety of Gas Transmission and Gas Gathering  
22 Lines NPRM. So since the preparation of the

1 PRIA, we've received the first round of annual  
2 reports from Type C operators. And so we  
3 identified 525 operators reporting Type A, B, C  
4 regulated onshore gathering lines. And of  
5 those, 325 operated Type C miles. Of Type C  
6 operators, 205 also operated other regulated  
7 gathering. And 142 operators of Type C lines  
8 representing 78 percent of Type C mileage also  
9 operated onshore transmission. Among the Type  
10 C operators, basically, a significant amount of  
11 mileage is operated by a relatively small  
12 number of operators. So you can see here, we  
13 found that 84 percent of mileage was operated  
14 by operators with over 250 miles of Type C, 71  
15 percent by operators with over 500 miles, and  
16 62 percent of mileage operated by operators  
17 with over 1,000 miles.

18 So this next slide compares the  
19 mileage from the 2020 used for the PRIA with  
20 the most recent annual report. And basically,  
21 it's relatively similar to what we estimated  
22 for the Type C mileage in the PRIA. So this

1 next slide just shows the total Type C mileage  
2 by operator for those operators with 500 miles  
3 or more.

4 Okay. So moving on. So this sort  
5 of identifies why the agency chose to include  
6 the Type C and gathering generally within the  
7 proposed rule. So as you can see from the  
8 mileage and leak information from the first  
9 round of annual reports, Type A, B, and C  
10 gathering miles have a higher leak rate per  
11 mile than onshore transmission. And noteworthy  
12 for the Type C gathering, we identified 427  
13 leaks in the 2022 annual report. However, one  
14 thing to keep in mind there is that the  
15 majority of Type C mileage is not required to  
16 perform leakage surveys or repair hazardous  
17 leaks. And the baseline of mileage could be  
18 lower if you exclude operators that are  
19 currently not subject to repair requirements.

20 And then there's the overarching  
21 caveat described in the NPRM, that all of these  
22 reports reflect leaks repaired. And as we're

1 aware, there's no federal requirement to repair  
2 all of these leaks. Additionally, the  
3 compliance deadline for Type C gathering lines,  
4 for those gathering lines less than 12.75  
5 inches, was extended until May 17th of 2024.

6 So we likely don't have the complete picture of  
7 leak repairs for those Type C lines that are on  
8 the extended compliance deadline.

9 The other issue on gathering that we  
10 identified pretty early on in the development  
11 of the proposed rule in addition to the higher  
12 frequency of leaks is the higher average  
13 emissions associated with pipeline leaks from  
14 gathering systems. So for the EPA emissions  
15 factors for the 2021-year published for the  
16 draft 2023 Greenhouse Gas Inventory,  
17 transmission pipeline leaks have an emissions  
18 factor of about 11 kilograms per mile compared  
19 to gathering and boosting pipeline leaks at 255  
20 kilograms per mile, based on information  
21 submitted under the Greenhouse Gas Reporting  
22 Program. Additionally, the proposed rule and

1 the PRIA described recent aerial surveillance  
2 studies suggesting gas gathering emissions  
3 could be even higher than estimated in the  
4 greenhouse gas inventory emissions factor,  
5 although those were in specific geographical  
6 areas.

7 So the next slide in a pretty small  
8 font, so I apologize for this, is regarding the  
9 authority to regulate gas gathering lines. We  
10 addressed this in the initial briefing. So  
11 I'll keep it relatively brief. But the  
12 Pipeline Safety Act gives PHMSA clear authority  
13 to regulate offshore gathering in Type C  
14 gathering lines and to address the potential  
15 safety in environmental hazards from those  
16 lines.

17 Additionally, the Section 114  
18 mandate codified in 49 U.S.C. 60108 is  
19 generally applicable to persons owning or  
20 operating a gas pipeline facility, which  
21 includes operators of regulated gas gathering  
22 lines. Additionally, while Congress

1 specifically required PHMSA to address to apply  
2 LDAR regulation to certain types of pipelines,  
3 PHMSA has the authority to apply the LDAR  
4 regulations to additional types of pipelines  
5 per 49 U.S.C. 60102. And Congress did not  
6 explicitly exclude any type of pipeline from  
7 the statutory text. Similarly, while 49 U.S.C.  
8 60132 did not explicitly mandate PHMSA to apply  
9 NPMS regulations to gathering line, PHMSA can  
10 propose to require operators of offshore and  
11 Part 192 regulated onshore gathering lines to  
12 submit geospatial location data pursuant to the  
13 agency's broad safety and environmental  
14 submission authority. Finally, PHMSA notes  
15 that the NPMS requirement in the proposed rule  
16 would not apply to Type R gathering lines.

17 Okay. So this is what we teed up at  
18 the end of the last meeting. We requested  
19 committee recommendations on the requirements  
20 of the proposed rule for Type C gathering  
21 lines, procedure manual requirements for Type B  
22 and C gathering lines, and the adoption of the

1 GPAC recommended patrol frequencies for Type B  
2 and C regulated onshore gathering lines and  
3 finally, the applicability of NPMS requirements  
4 to regulated onshore gas gathering lines.

5 MR. GALE: Thank you, Sayler.

6 Chairman, at this point, we're  
7 actually ready for the committee discussion.  
8 We're not recommending a public comment. We  
9 had that last time, is our thought that there's  
10 not a need for that. What we're seeing on the  
11 screen right now were the two vote options that  
12 were being discussed for the committee to look  
13 at. And that being said, sir, I'm just going  
14 to turn it over to you to have your committee  
15 discussion.

16 MR. DANNER: All right. Thank you.

17 Before we begin the discussion, let  
18 me ask if any members have any questions for  
19 Sayler about what was presented this morning.

20 Erin Murphy?

21 MS. MURPHY: Yeah. Thanks so much.

22 That was a really helpful presentation. I just

1 wondered if you could clarify, when you  
2 presented the slide with the leak rates for the  
3 different types of gas gathering pipelines and  
4 you mentioned the distinction that only about  
5 20,000 miles of Type C are already subject to  
6 leak survey standards, though, in fact, that  
7 may not be even an enforcement yet.

8 Was the leak rate that was presented  
9 or the leaks per mile rate that was presented  
10 calculated for all 90,000 miles or just for  
11 that 20,000-mile subset?

12 MR. PALABRICA: Yeah. So the leak  
13 rate in the table is based on the 90,000. In  
14 the notes, we've included an estimate of  
15 approximately 21 if it's based on the 20,000  
16 miles subject to leakage surveys that we  
17 estimated in the NPRM. But that has a lot of  
18 caveats, as we've discussed. But just for  
19 illustration, we've included that in the notes.

20 MS. MURPHY: Okay. Thank you. So  
21 if you're assuming operators were only leak  
22 surveying what they would be required to start

1 leak surveying after May 17th of this year, it  
2 would be a leak rate of 21 per 1,000 miles?

3 MR. PALABRICA: Correct.

4 MS. MURPHY: Thanks.

5 MR. DANNER: All right. Any other  
6 questions for PHMSA before we begin the  
7 discussion?

8 All right. So thank you for putting  
9 this slide up.

10 This is where we left it on December  
11 1st. We had one option. PHMSA should seek  
12 additional information regarding several  
13 bullets there. And the second option is that  
14 the committee endorses the NPRM regarding the  
15 applicability of leak survey and repair  
16 standards to Type C and that PHMSA consider  
17 information to establish appropriate compliance  
18 timelines for these standards and recommends  
19 that PHMSA evaluate leak survey and repair  
20 standards for Type R gathering lines.

21 Let me see if there's anybody who  
22 would like to begin the discussion. We have

1 two options before us. Are there any other  
2 options that anyone would like to put on the  
3 table?

4 Chad Zamarin?

5 MR. ZAMARIN: Thank you.

6 Chad Zamarin, Williams. I did  
7 provide some slides that I thought might be  
8 helpful to walk through as a little bit of  
9 background.

10 If we could bring those up.

11 MR. GALE: Yeah. One second.

12 MR. ZAMARIN: Thanks. So I know we  
13 spent a lot of time last time we were all  
14 together, and I was hoping to just provide some  
15 background slides to try to provide some  
16 context and perspective on why, you know, we  
17 feel the requirements that we're proposing make  
18 the most sense. And so you know, this is a  
19 map. I've got some Williams examples here.  
20 I've got another operator's example as well.  
21 So I'm going to go through these really  
22 quickly.

1                   But this is a map of a gas  
2 transmission system. This is our Transco  
3 pipeline. Most people are familiar with this  
4 pipeline. Transmission lines, generally long  
5 crossing interstates, you can span long  
6 distances, pretty easy to use technologies like  
7 aerial surveillance. And we do; we fly  
8 pipeline routes. They're very linear in  
9 nature. And so well-suited for aerial  
10 surveillance and survey.

11                  I want to show an example. You can  
12 see the red box up there in Northeastern  
13 Pennsylvania. We're going to zoom in there and  
14 just show. So if you haven't seen, you can  
15 kind of see the difference between transmission  
16 and gathering. So this is kind of the tail end  
17 of the transmission system that you saw on the  
18 previous map. And if you advance one more  
19 slide, you'll see gatherings start to show up  
20 here on the slide. And you can see the very  
21 different nature of the gathering system. And  
22 this is just the Williams gathering system in

1       this area.

2                   I can tell you that there are also  
3       literally, you know, hundreds of miles of  
4       additional gathering that crisscross this area,  
5       other operators that gather in this area. And  
6       the gathering pipelines are complex networks.  
7       They connect to production sites. Typically,  
8       smaller diameter lines connect to the  
9       production sites. They come into larger  
10      diameter trunk lines, and those then connect to  
11      processing facilities, or in the case of  
12      Northeastern Pennsylvania, this is dry gas  
13      gathering. It can be brought in general  
14      directly into the transmission system. And so  
15      you can see kind of the spider web nature and  
16      the topography of the gathering system is very  
17      different than in a long, linear transmission  
18      system, so it makes it challenging from an  
19      aerial surveillance perspective.

20                   And just to put into perspective the  
21      scale of what we're looking at here, I think if  
22      you advance one more slide, this is an overlay

1 of the State of Rhode Island. It's a small  
2 state, but it's an entire state. So just to  
3 give you an idea of just a single gathering  
4 system, you know, spanning this area. And  
5 again, this is, you know, just the Williams  
6 system, this area. And there are literally  
7 spider web networks throughout the entire  
8 United States where we gather gas.

9 Go to the next slide. Sayler talked  
10 about the definitions. I did want to introduce  
11 a concept that we've been looking at since the  
12 last meeting and trying to figure out a way to  
13 phase in the advanced leak detection and repair  
14 for gathering. If you look at the regulations,  
15 these are the breakdowns that you saw in  
16 Sayler's slides, a little bit of kind of  
17 abbreviated definition.

18 But there is a subset of Type C that  
19 is subject to various code requirements. We've  
20 basically taken one step into the Type C  
21 gathering lines for various requirements within  
22 the code. And it focuses on in Type C, those

1 lines that are greater than 16-inch in diameter  
2 or lines that are greater than or equal to 8-  
3 inch nominal pipe size with a PIR exception  
4 that basically is, if there's a structure  
5 within the potential impact radius of the  
6 pipeline, then it's also included. And so you  
7 basically get larger diameter, larger volume  
8 pipelines and/or pipelines that are close to  
9 population with that. So I just want to  
10 introduce that concept.

11 And if you go to the next slide,  
12 I'll kind of show you the breakdown of these  
13 different areas. This is a different gathering  
14 system; again, a Williams system. This is in  
15 Wyoming. You're seeing kind of the  
16 southwestern quarter of the state of Wyoming.  
17 You can see a transmission line that's running  
18 through this area. That transmission line runs  
19 all the way to Canada and the west coast. So  
20 again, long linear line transmission line.

21 If you go to the next slide, you'll  
22 see gatherings start to show up. This is our

1 Type A and B gathering in Wyoming. Not very  
2 much. You can see very small amount near the  
3 transmission system.

4 If you start bringing in Type C on  
5 the next slide. Thank you.

6 So this is that subset of larger  
7 diameter, larger volume Type C pipelines. If  
8 you advance another slide, now you start to see  
9 the entire kind of gathering system, the Type C  
10 that is not larger diameter close to population  
11 and the Type R. I thought I actually had  
12 another slide that showed the additional Type C  
13 come in. I might have these out of order.  
14 Yep, I did.

15 Go ahead to the next slide. Well,  
16 maybe not.

17 But anyhow, again, just to give some  
18 perspective, and these are only the Williams  
19 systems in these areas, you can see the real  
20 spider web nature and why it's more challenging  
21 from a survey and patrol perspective. Again, a  
22 small state, but this is the outline of the

1 state of Delaware on both of these gathering  
2 systems. So, you know, we're managing  
3 operations across a footprint that's, you know,  
4 the size of an entire state; just one operator,  
5 one system.

6 Okay. Next slide.

7 And then another operator's example.

8 And I appreciate everybody. Bear with me.

9 This is the last example. This is in New  
10 Mexico, San Juan Basin. If you see, there's  
11 very little transmission in the area of this  
12 operator. There are transmission lines that  
13 run across this area.

14 If you advance the slide, you'll see  
15 on the next slide, there's your Type A and B  
16 gathering, the high-pressure large diameter  
17 gathering pipelines. If you advance to the  
18 next slide, that's your Type C. So this is the  
19 Type C, the subset that I mentioned that  
20 requires that has been kind of that first step  
21 into Type C for various parts of the  
22 regulations. If you advance another slide,

1       you'll see the rest of Type C show up. And  
2       this is, again, why we think it makes a lot of  
3       sense to phase the approach to gathering  
4       because you start getting much more complex  
5       networks and much more challenging. And with  
6       the blue that showed up there, you've picked up  
7       the largest diameter, the largest volume and  
8       then any pipeline that's in proximity to an  
9       inhabited structure.

10               If you go to the next slide, you'll  
11       see why Type R is that much more challenging.  
12       Type R is very small diameter, generally. And  
13       again, this is just one operator. There are  
14       other operators that crisscross across this  
15       particular basin.

16               Next slide. And then this is also  
17       just another way of showing what Sayler had  
18       showed. I did want to introduce the concept,  
19       and I appreciate that PHMSA did as well. You  
20       can see here that there are a relatively small  
21       number of large operators that operate  
22       gathering. But one of the challenges of the

1 gathering space, unlike the transmission  
2 industry, we're generally more concentrated in  
3 the transmission industry, but there are very  
4 small gatherers that make up a relatively small  
5 amount of the total mileage and volume. But  
6 you can see over 500 operators. You can see  
7 that, you know, a targeted approach would  
8 certainly capture the majority of pipelines if  
9 you focus on larger operators.

10 And then I think I have one more  
11 slide. And so we did try to do some work  
12 between the last meeting and today to try to  
13 make sense of what I just presented and work  
14 with different stakeholders.

15 So we are proposing, I think it was  
16 what we had talked about in Option 1 of the  
17 slides, that you had put up, Chairman Danner,  
18 that we phase the approach to gathering for  
19 advanced leak detection requirements and  
20 repair. And we start by following the  
21 precedent that you see in that third bullet,  
22 aligns with extending regulatory requirements

1 to Type C. Those are the sections that I think  
2 are the primary sections that apply to that  
3 subset of Type C. And those are those  
4 pipelines greater than 16 inch in diameter or 8  
5 inch to 16 inch if the segment contains a  
6 building intended for human occupancy or  
7 another identified site within the PIR  
8 classification unit. And then we would also  
9 propose that we discuss a potential exclusion  
10 for smaller operators. And that's all I've  
11 got. Thank you.

12 MR. DANNER: Okay. And just to be  
13 clear, your exclusion for small operators,  
14 you're talking about Type C here, right?

15 MR. ZAMARIN: Yes.

16 MR. DANNER: Okay. All right.

17 Any questions for Chad Zamarin on  
18 what he has put up?

19 Yes, Arvind?

20 MR. RAVIKUMAR: Just a point of  
21 clarification on the last figure you showed.  
22 Most gathering lines with a very small number

1 of operators, is that just Type C or all  
2 gathering lines?

3 MR. ZAMARIN: Sorry. That data, and  
4 I think Sayler's was as well, that's just Type  
5 A, B, and C based on the annual report data.

6 So if you go back one slide. Oh,  
7 sorry. Those are your slides. That's okay.

8 But it was just Type A, B, and C.

9 MR. RAVIKUMAR: Okay. So it doesn't  
10 include gathering lines that are not subject to  
11 reporting, right?

12 MR. ZAMARIN: It does not. No. It  
13 was taken from the annual report data.

14 MR. RAVIKUMAR: Thank you.

15 MR. DANNER: No other questions or  
16 comments?

17 Erin Murphy?

18 MS. MURPHY: Erin Murphy, EDF.  
19 Sorry. I'm just kind of trying to absorb.

20 Can you one more time clarify the  
21 distinctions between this proposal and the  
22 proposal that was on the table from maybe you,

1 Chad, or someone from industry at the end of  
2 the last meeting?

3 MR. ZAMARIN: Sure. Chad Zamarin,  
4 Williams. I don't remember how the proposal  
5 got developed last meeting. I think it was an  
6 amalgamation of a lot of work that we all kind  
7 of did, and there ended up being those two  
8 options. But if I read and recall kind of  
9 Option 1, you know, there was obviously a big  
10 debate about whether or not Type C should be  
11 included at all. I think there is a view that  
12 we heard by members of the public and even some  
13 on the committee, and I know the PHMSA slide  
14 stated that the law did not explicitly state  
15 that Type C should not be included, but it was  
16 very specific that the regulation should apply  
17 to Type A and B and did not reference applying  
18 these rules to Type C. So there's a big, I  
19 think, discussion that we had about whether or  
20 not the regulation should extend to Type C.  
21 And on that first, we said that we should adopt  
22 a phased approach to including Type C gathering

1 in the regulation.

2 What we've tried to do with this  
3 proposal is provide some more specificity to  
4 that, what a phased approach would look like.  
5 You know, we see how other regulatory  
6 requirements have been phased in for Type C  
7 based on the definition of larger than 16 inch  
8 and in proximity to a structure within the PIR.  
9 So that's what we were trying to do is put some  
10 more specificity around that proposal and put  
11 it in the context of understanding why. That's  
12 why, you know, the maps, I hope, were helpful.

13 You know, I think we have the goal  
14 to monitor all of our systems all of the time,  
15 but we have to deal with the fact that we don't  
16 have technology yet that allows for efficient  
17 monitoring of these complex networks across  
18 large geographies. And so that was the goal of  
19 the proposal is to fit within that first  
20 option.

21 MS. MURPHY: I have a follow-up.

22 MR. DANNER: Follow-up? Yeah.

1 MS. MURPHY: Thanks. Erin Murphy,  
2 EDF. Thanks for clarifying. If we could go  
3 back. Thank you.

4 I'm still just trying to make sure I  
5 understand the proposal that's on the table.  
6 When I hear a phased approach, I'm thinking,  
7 you know, there's a timeline and a path for  
8 when all Type C gathering would be fulfilling  
9 the leak survey and repair practices and  
10 standards. And this looks to me like it's a  
11 proposal that GPAC recommended to PHMSA that  
12 only a subset of Type C gathering pipelines  
13 would be subject to leak survey and repair  
14 standards full stop. And I don't see sort of  
15 an on ramp for the remainder of the mileage.

16 Am I understanding that correctly?

17 MR. DANNER: Chad?

18 MR. ZAMARIN: Yeah.

19 Yeah. Again, this was not meant to  
20 be all encompassing as the proposal. I would  
21 go back to the prior slide. I mean, the idea  
22 that there may need to be follow-on rulemakings

1 at some point in the future, I would caution,  
2 though, that it is a challenge to, I think, set  
3 timelines around an area where technology is  
4 just now evolving. You know, I do believe that  
5 the ultimate solution for monitoring gathering  
6 systems will likely be satellite technology,  
7 but we can't today rely on satellite technology  
8 to monitor gathering systems. I mean, we've  
9 only just started that technology deployment,  
10 and it's very limited. And frankly, you saw  
11 the operator distribution for most operators  
12 would be cost prohibitive.

13 But again, I think what I recall  
14 from our discussion on Option 1 was to consider  
15 whether a separate rulemaking is appropriate is  
16 that we were talking about evaluating over  
17 time. If you start with this subset of Type C,  
18 PHMSA, you know, takes the learnings from that  
19 experience and understands the challenges or  
20 opportunities of extending that to additional  
21 mileage over time. That concept, I think, is  
22 what we felt makes a lot of sense. And I'm not

1       trying to suggest that this is the end, and  
2       this is kind of full stop, that that wouldn't  
3       be something we think makes good sense.  
4       Thanks.

5                   MR. DANNER: All right.

6                   Sara Gosman, and then Andy Drake.

7                   MS. GOSMAN: Thanks very much for  
8       this proposal, Chad. I just wanted to make  
9       sure I understand the amount of mileage that  
10      you are talking about here when you're looking  
11      at this subset. So what I understand is you're  
12      going to take the 20,000 miles subject to leak  
13      surveys out of the approximately 93,000 as of  
14      the recent reporting. And then you're going to  
15      also add an exception for operators under 500  
16      miles. So if I'm calculating this correctly --

17                  MR. DANNER: I'm sorry, Sara. Could  
18      you repeat those numbers? I didn't get it.

19                  MS. GOSMAN: Yeah. Yeah. Yeah.  
20      Well, let me put the numbers that I believe  
21      I've heard, and then Chad can correct me if I'm  
22      wrong. So I think what we're talking about

1 here is about 14,200 miles out of the 93,000  
2 miles of total Type C gathering, and how I'm  
3 getting there is by looking at the mileage  
4 that's subject to leak surveys, which is about  
5 20,000 miles PHMSA said on the slide. And then  
6 71 percent of Type C is over 500 miles in terms  
7 of operators. And so that gets me, again, to,  
8 if we add that on top, to about 14,200 miles.  
9 So I wanted to check my math on that with you  
10 and make sure I'm correct.

11 MR. DANNER: Chad.

12 MR. ZAMARIN: Chad Zamarin,  
13 Williams. First of all, I just suggested we  
14 discuss whether a small operator exclusion  
15 makes sense. I did not put a 500-mile  
16 threshold on there. But the 20,000 miles is  
17 correct. That is the subset of Type C  
18 gathering that I'm proposing we focus on first.  
19 I don't know that you can exactly extrapolate  
20 the percentage to that because my guess is that  
21 larger operators likely operate the larger  
22 diameter pipe. So it might not be that you

1 can, you know, perfectly kind of extrapolate  
2 the calculation like you just did. But  
3 generally, the concept would be focus on the  
4 subset, the larger diameter pipe.

5 And frankly, from my perspective,  
6 I'm a large operator, so if you're focusing on  
7 that subset, I don't know if the operator  
8 exclusion makes sense or not. It was just  
9 something that I think we had recognized in the  
10 data that there is a challenge with very small  
11 operators not having the resources and this  
12 being a burden that they might not be able to  
13 bear.

14 MR. DANNER: All right. Andy Drake.

15 MR. DRAKE: Andy Drake, Enbridge.  
16 Thinking back to Erin's question, the way this  
17 strikes me is more just data right now. I'm  
18 not sure we're at the proposal stage. But I  
19 think the thing that strikes me here that I  
20 think is noteworthy is, one, the gathering  
21 industry is not nearly as mature in their  
22 programmatic development or the regulatory

1 obligations as the transmission sector is. I  
2 mean, that's just a fact. I mean, they just  
3 brought in to rid three here recently. So  
4 there's just a subset that's getting their feet  
5 under them on programs and things. Two, the  
6 nature of gathering is not linear. So we have  
7 to understand that, that the application of  
8 tools that we've spent the last meeting mostly  
9 talking about have to be very thoughtfully  
10 deployed here because it doesn't work the same.  
11 They're not linear assets. They are  
12 reticulated assets.

13 So as we talk about phasing, I  
14 harken back to a comment that Stacy Gerard used  
15 to use: If it looks like a duck, walks like a  
16 duck, quacks like a duck, it's probably a duck.  
17 What we put up here is this looks like a duck.  
18 This looks like transmission. They're  
19 obligated to monitor. They are large. They  
20 have the ability to, you know, create a certain  
21 fingerprint and footprint. And they're  
22 physically more ready to be brought into this

1 rule because of where they are with their  
2 programmatic development and maturity. A lot  
3 of C is not in that space. They aren't  
4 obligated to do these things. Where they are  
5 with their programs on those things is not in  
6 the same place. And the technology we would  
7 have to deploy to inspect them would not be the  
8 same.

9 We would have to switch gears  
10 completely away from aerial patrol or aerial  
11 surveillance for probably something like  
12 satellites, which I think, you know, going back  
13 again to looking at the integrity rule, we  
14 talked about managing certain threats and we  
15 started talking about, well, there are these  
16 coming technologies. And I remember quite  
17 clearly when we wanted to use this technology,  
18 we were told, no, we're not going to let you  
19 bank on managing the threat through a  
20 technology that doesn't exist. That's a  
21 precedence here, too.

22 It's not that I think we're opposed

1 to bringing in C or we're opposed to  
2 satellites. I think we have to be mindful that  
3 they're new. We haven't even gotten a track  
4 record on satellites yet. And so as we think  
5 about deploying to the rest of C, we're  
6 probably going to switch into a technology  
7 that's not very mature. And we just need to  
8 think about that. I'm not saying no. It just  
9 has to be staged to accommodate that, which is  
10 the same thing we did with the integrity rule  
11 here a few years ago.

12 And I think that's where I am  
13 anyway. It's not really to a proposal yet.  
14 It's to differentiating things that look like  
15 things we've already talked about. So that  
16 subset, you know, looks like transmission.  
17 It's mature enough to be in this role, which is  
18 not exactly what was being proposed a little  
19 while ago. I think that makes sense.

20 Things that don't look like the duck  
21 we should think about how do we want to bring  
22 them into the rule or when would we want to

1 bring or what technologies would have to happen  
2 to bring them into this place. And that's, I  
3 think, where I am anyway is just be aware of  
4 the differentiation because the different tools  
5 are going to be brought to bear, different  
6 timelines, different approaches are going to  
7 have to be brought to bear to bring those kinds  
8 of assets into this discussion. Okay.

9 MR. DANNER: Thank you.

10 Can you give me an idea of how  
11 significant the methane emissions are from the  
12 Type Cs that would be excluded here? Anybody?

13 Arvind, do you want to address that?

14 MR. RAVIKUMAR: All right. So a  
15 couple of things. There are three studies that  
16 directly measure methane emissions from  
17 gathering pipelines. I think two of them were  
18 on the slides that PHMSA put up. There was one  
19 that was published, I think, last month that  
20 included about, I think, 50,000 miles of  
21 gathering pipelines. And now, most of these  
22 studies don't distinguish between the type of

1 gathering pipelines because they're often the  
2 aerial surveys. But it's one of the most  
3 comprehensive measurements of methane emissions  
4 from gathering pipelines. We don't have such  
5 depth of data even for transmission pipelines.

6 And in all of these three studies  
7 that have been done over the past, I would say,  
8 three years measuring gathering pipeline  
9 emissions, methane emissions have been  
10 disproportionately large for gathering  
11 pipelines. And not because there's something  
12 inherent to gathering pipelines that they emit  
13 a lot of methane. I think it's because a large  
14 fraction of gathering pipelines have never been  
15 under leak detection repair programs. And so  
16 we know from past experience and other types of  
17 assets that the first time you do a leak  
18 detection repair survey, you find a lot of  
19 emissions, you fix them. And the second and  
20 the third and the fourth time you do it, you  
21 don't find as much emissions.

22 So the reason we find a very large

1 volume of methane emissions from gathering  
2 lines is because they've never been subject to  
3 LDAR regulations. Not all of them. Most of  
4 them have never been subject to LDAR  
5 regulations before. If you look at the actual  
6 numbers, depending on the basin, it can cover  
7 anywhere between 18 percent of emissions in the  
8 region to about 37 percent of emissions, and  
9 individual leaks from gathering pipelines can  
10 range from about 10 kilograms per hour to over  
11 100 kilograms per hour. There are many small  
12 leaks that are below 10, but those are all  
13 small, and they don't contribute a lot to total  
14 emissions.

15 MR. DANNER: Okay. But we don't  
16 really have the information to separate out of  
17 this 93,000, the 20,000 that would be covered  
18 by this proposal versus the other 73,000.

19 MR. RAVIKUMAR: That is correct.  
20 However, I would say that the most recent  
21 survey that we have data from covered nearly 60  
22 percent of gathering pipelines in several

1 basins. So it most likely included a lot of  
2 Type C miles as well. It just did not specify  
3 how much.

4 MR. DANNER: All right. Thank you.

5 Erin had her card up first.

6 But Chad, did you want to speak to  
7 this?

8 MR. ZAMARIN: Sure.

9 Chad Zamarin, Williams. I was just  
10 going to say that those types of leaks and the  
11 size that Arvind is referencing, I mean, those  
12 would be from larger diameter, higher pressure,  
13 which I do believe that's the intent of what  
14 we're proposing. And we say gathering  
15 pipelines. A lot of the leaks from gathering  
16 systems, the emissions is probably a better way  
17 to state it. I mean, I've said this many  
18 times. I know we talked about it at the last  
19 meeting.

20 There is equipment that is designed  
21 to create emissions in gathering systems. I  
22 mean, it's going to take decades. We're

1 working on retrofitting, but there are  
2 literally pneumatic devices that every time  
3 they operate, they are intentionally emitting  
4 gas to atmosphere. There are flaring systems.  
5 There are venting systems. There are tanks and  
6 dehydration equipment.

7 I mean, the gathering industry,  
8 again, was built for 200 years without the  
9 knowledge of methane being a problem and a  
10 potent greenhouse gas. And so I do think we  
11 have to be careful with, you know, categorizing  
12 the pipe that we're talking about into all of  
13 those different potential sources. But from a  
14 volume perspective, large leaks would be larger  
15 diameter, equipment pipelines. And that's what  
16 the kind of the designation is intended to  
17 capture.

18 MR. DANNER: Okay.

19 Andy, did you want to speak to that?

20 I'm sorry, Erin. I keep putting you  
21 off here.

22 MR. DRAKE: I think it's just a

1 qualification. I think this is important that  
2 some of the things that Chad was just talking  
3 about: equipment, blowdowns, you know,  
4 processing plants, those are under the EPA  
5 rule. Some of these huge sources which are  
6 site specific are plants, and the plants are  
7 under the quad 0 rule. And I think that's  
8 important. So those big sources, and those are  
9 big sources, we're not going to shape those  
10 here. They're shaped separately in the EPA's  
11 rule.

12 MR. DANNER: All right. Thank you  
13 for that. Erin Murphy?

14 MS. MURPHY: Thanks.

15 Erin Murphy, EDF. I think it's been  
16 helpful to sort of understand the contours of  
17 what Chad is putting forward. And I think I  
18 would like to take a step back and walk through  
19 some of the elements of that proposal and what  
20 we're talking about here and maybe to start  
21 with technology and what technology is  
22 available and what's expected to be used to

1 survey gas gathering pipelines for methane  
2 leaks. The expectation from EDF's perspective,  
3 from many public stakeholders, and what's  
4 already widely in use is aerial surveys for gas  
5 gathering pipelines, which are flyovers  
6 typically by planes, I have also seen it done  
7 by helicopter, those are also used for  
8 transmission pipelines, they're being deployed  
9 by leading operators already for gathering  
10 pipelines. And they are widely commercially  
11 available and have been demonstrated to be able  
12 to detect and pinpoint the location of leaks on  
13 gathering pipelines.

14 I think the maps that Chad was  
15 walking through, from my perspective, really  
16 demonstrate how much sense it makes to  
17 incorporate all gathering pipelines under the  
18 same leak survey and repair standard because  
19 you're seeing a geographic area where you have  
20 Type A, B, C, and even R, you know, just  
21 because of the nature of the infrastructure  
22 being grouped together. So that really is

1 ideally suited for that flyover technology  
2 where you can cover that swath of area and  
3 identify those leaks.

4 I want to talk a little bit about  
5 Yu, et al. (2022), which is one of the peer-  
6 reviewed studies that was referenced by PHMSA  
7 in the proposed rule and also submitted by EDF  
8 into the rulemaking docket. That study  
9 involved aerial surveys in the Permian Basin in  
10 the United States from 2019 to 2021. They were  
11 using aircraft equipped with a sensor capable  
12 of imaging and quantifying large plumes of  
13 methane. The aerial flights for that survey  
14 campaign covered over 10,000 miles of gathering  
15 pipelines in each of the campaigns. So they  
16 were flying over the infrastructure multiple  
17 times to check and make sure if the leaks were  
18 still present or if they had been mitigated,  
19 and they identified hundreds of high emitting  
20 leaks on pipelines during those flyovers.

21 The researchers also used the  
22 available maps that they were able to access.

1 And where there was a leak where you had a  
2 gathering line and a transmission line directly  
3 adjacent to each other and they weren't quite  
4 able to be totally sure if it was the gathering  
5 or the transmission line, they even excluded  
6 those identified leaks from the study, just to  
7 ensure that the study was really only including  
8 leaks identified on gathering pipelines. I  
9 think that makes sense for the peer-reviewed  
10 research context but shows you if you're the  
11 operator, right, that's when that follow-up on  
12 the ground to pinpoint the site of the leak  
13 with a handheld or whatever technology you're  
14 using is when you would be able to pinpoint  
15 that leak.

16 That's not the only study. There  
17 are a couple others that are out there, and as  
18 Arvind just noted, I'm interested in the new  
19 one that came out. There's more research going  
20 on all the time here. I think satellites are  
21 also a really promising technology for methane  
22 detection, but satellites are picking up

1 massive leaks. And obviously, it's critical  
2 that we mitigate massive methane sources to  
3 address climate change. But those are not the  
4 only leaks that are important. And the aerial  
5 technologies that are commercially available  
6 and proven are really what, I think, makes the  
7 most sense for gathering pipelines and also was  
8 what GPAC supported at the last meeting when we  
9 were talking about the technology standard of  
10 10 kilograms per hour for transmission and  
11 gathering.

12 I also just wanted to very briefly  
13 speak to emissions. I know Arvind spoke to it.  
14 I think, you know, we don't have a precise  
15 emissions number for the different gathering  
16 pipeline types. I would say, you know, looking  
17 at the maps Chad was sharing and seeing that  
18 information laid out really makes me think  
19 about the importance of including gathering  
20 pipelines in the NPMS, the importance of making  
21 this information available to the public. The  
22 researchers that we work with are not able to

1 do a study that says these leaks are on this  
2 type of gathering pipeline because we don't  
3 have that information. So really great to see  
4 those maps. You know, I hope those can be  
5 submitted to the docket. And I also think that  
6 kind of speaks to the importance of information  
7 access so that we can all understand this  
8 infrastructure and be starting in the same  
9 place.

10 I think the final point I want to  
11 make is on timing. It feels like a lot of this  
12 discussion is not so much about what makes  
13 sense in terms of where can we find leaks and  
14 fix them? I think, you know, PHMSA's proposed  
15 rule in supporting record, the information  
16 stakeholders have submitted, really demonstrate  
17 that all Type C gathering pipelines are  
18 accessible. We can find and fix the leaks on  
19 those pipelines, and they're already a  
20 regulated category of gathering pipeline that  
21 should be fully included in a final rule.

22 It really feels to me like we're

1 talking more about timing: How much time does  
2 industry need to scale up and comply with those  
3 standards? This kind of brings to mind, we've  
4 been referencing this date in May of this year,  
5 which I'm very much excited to know that that  
6 day is coming when, you know, the industry is  
7 going to be coming fully into compliance with  
8 the 2021 Gas Gathering lines rule. We saw the  
9 gathering industry seek judicial review of  
10 PHMSA's 2021 gathering pipeline's final rule,  
11 and the industry and PHMSA were able to reach a  
12 consensus, right, not to fully litigate that  
13 issue. And instead, the real determination was  
14 industry needs another year. They needed some  
15 more time.

16 And so there's that agreement that's  
17 in place and the expectation that the  
18 enforcement discretion notice will end in May.  
19 And so, you know, if we can avoid all of that  
20 and the Committee can talk about timing, but I  
21 feel like maybe that's getting us more to the  
22 compliance deadline part of the conversation.

1 But I just want to bring that up now since it  
2 feels like a pertinent issue.

3 MR. DANNER: All right. Thank you.  
4 Robert Ross?

5 MR. ROSS: Robert Ross, PHMSA. To  
6 build on what Erin pointed out, this is  
7 discussed at length in the Federal Register  
8 notice for the rulemaking at Page 31912.  
9 PHMSA, when we were supporting the rule,  
10 actually went back and compared Texas Railroad  
11 Commission data speaking to the diameter of  
12 pipe that correlates roughly to what would be a  
13 Type C or other Part 192 regulated pipeline and  
14 determined that a lot of the pipeline mileage  
15 that, you know, the EDF Permian Basin summary  
16 study looked at was, in fact, Part 192  
17 regulated line pipe as opposed to other  
18 facilities. Thanks.

19 MR. DANNER: All right. Chad  
20 Zamarin?

21 MR. ZAMARIN: Yeah. Thanks.

22 Chad Zamarin, Williams. I think

1 those are important data points. I do want to  
2 caution we're talking about standards, not just  
3 for the Permian Basin, not just for a subset of  
4 pipe in a study. And just to give, you know,  
5 more clarity, you cannot fly like the lines  
6 that I showed in Pennsylvania with an airplane.  
7 Because of the geography, because of the  
8 topography, we actually have to fly a  
9 helicopter because of the changing elevation  
10 and the inability to fly fixed-wing aircraft at  
11 fixed height across that landscape.

12 And in the last 10 years, we've  
13 detected one leak on that gathering system, and  
14 it would take two to three weeks of flying a  
15 helicopter constantly in order to survey that  
16 area. And you would burn more emissions in  
17 flying a helicopter around that area. So we  
18 don't survey all gathering systems with aerial  
19 surveillance. It's not practical in many  
20 areas.

21 And we're talking about minimum  
22 standards that have to apply to all pipelines,

1 not just a pipeline that's linear in the  
2 Permian Basin or that was the subject of a  
3 study. We're talking about every single, you  
4 know, pipeline situation is going to be  
5 impacted by the regulation. So I think we've  
6 got to keep in mind that unfortunately, it's  
7 not that simple and straightforward for all  
8 pipelines. Thank you.

9 MR. DANNER: Thank you. Andy Drake?

10 MR. DRAKE: Thank goodness for long  
11 arms. Andy Drake, Enbridge. I want to come  
12 back to something Erin said, and I think this  
13 is important. And that is, we agree the aerial  
14 patrol is an effective technology that it can  
15 pick up leaks, you know, and that it's proven.  
16 I think the thing that we're trying to see here  
17 is how can we apply it to this kind of asset?  
18 It's not the same as it is on transmission.  
19 The linear assets are very conducive to support  
20 an aerial flight program.

21 When we start looking at these kinds  
22 of assets, we basically have to start switching

1 over to a matrix-type flying, which means we  
2 fly back and forth and back and forth to cover  
3 all of the different kind of reticulation of  
4 that asset. And it's not very efficient,  
5 especially when we start laying lots and lots  
6 of gathering systems on top of that. We would  
7 basically be flying entire states, the whole  
8 thing. And that's where we're trying to get to  
9 a place. We have to find a more practicable  
10 solution to monitor that kind of asset, shape,  
11 and orientation.

12 I think what we're putting forward  
13 is the duck phenomenon. There's certain assets  
14 in the gathering that are already monitoring  
15 these assets for leaks that we think because of  
16 their limited scope, so to speak, 22,000 miles,  
17 that we would bring them in under the aerial  
18 program. But how we handle the rest of that  
19 system, especially as we start looking out,  
20 when we start saying all, to try to cover all  
21 of the gathering system, I mean, all, aerial  
22 patrol would not be practical. We would

1       literally have to fly matrix flights over vast  
2       parts of the United States. And that is not  
3       doable, not sustainable, or practical for that  
4       kind of scale. So we've got to figure out a  
5       different answer for that kind of asset base.  
6       I think that's what we're struggling with, to  
7       be honest.

8                   MR. DANNER: All right. Thank you,  
9       Andy. Arvind?

10                  MR. RAVIKUMAR: So two points. I  
11       mean, last time when we were discussing all of  
12       this, we were focused on the technology  
13       standard for all the right reasons because  
14       technology is evolving. Things that didn't  
15       work yesterday will work tomorrow. You know,  
16       just between our last meeting and this meeting,  
17       there's been an extensive survey of gathering  
18       pipelines in Pennsylvania, bicarbonate map on  
19       an aerial platform. So we can see in real time  
20       that technologies are evolving rapidly, that  
21       new technologies can be deployed to measure  
22       methane emissions from gathering pipelines in

1 complex terrain.

2           So why don't we continue on with the  
3 same technology standard? Like before we'll  
4 say, you know, use whatever technology is most  
5 feasible at the time of your measurement.  
6 Let's have the technology standard at 10  
7 kilograms per hour. If an operator finds its  
8 satellites are most effective, then that's what  
9 they're going to use. If another operator  
10 finds aerial technologies are better, then  
11 they'll use that. So maybe perhaps we can move  
12 on to setting the technology standard and not  
13 worrying about which specific technology an  
14 operator will want to choose.

15           MR. DANNER: All right. Thank you.  
16 Sara Gosman?

17           MS. GOSMAN: Yeah. Thank you.

18           You know, I think this conversation  
19 is largely, again, about cost, right, and how  
20 operators are going to manage the costs of  
21 these programs. So I just want to make sure  
22 that we understand, I think, the

1 characteristics of the industry, and I want to  
2 repeat some figures that PHMSA had put up  
3 because I think they were helpful to me in  
4 understanding these issues. So for example,  
5 right, 62 percent of mileage is operated by 18  
6 operators with over 1,000 miles. And again, I  
7 think it's important to compare that to the 20  
8 percent that you are talking about here for  
9 this subset, right, of mileage. So we're  
10 talking about taking operators out of this  
11 particular requirement who have large amounts  
12 of miles. And it seems to me that, you know,  
13 they should be able to bear the cost of making  
14 sure that their systems are not leaking.

15           You know, another thing I think is  
16 important for me is that there are operators  
17 who are operating other pipelines, such as  
18 transmission pipelines, right? And everyone  
19 agrees transmission should be subject to these  
20 advanced leak detection requirements. So, you  
21 know, if 78 percent of Type C gathering is  
22 operated by operators who also have

1 transmission, I'm looking at that number and  
2 thinking about the subset that you are talking  
3 about. And it seems to me that what we're  
4 doing is we're exempting out operators who have  
5 transmission and thus, should have the ability  
6 to really stand up a program.

7 If we're talking about, really, the  
8 cost of the survey themselves, then I think  
9 what we're talking about is things like survey  
10 frequency, right? Which I think is something  
11 that we could have a conversation about in this  
12 room as it relates to reducing costs. But the  
13 conversation right now that we're having is  
14 really whether somebody should be subject to  
15 this program at all. And that seems to me like  
16 a lot of operators out there should, under  
17 these statistics, be able to do this program.

18 MR. DANNER: Chad Zamarin?

19 MR. ZAMARIN: Thanks.

20 Chad Zamarin, Williams. Yeah. Just  
21 to be clear, I don't think it's just about  
22 cost. I think it's cost-benefit. I think

1 we're trying to identify the pipelines that  
2 have the greatest potential for leaking at  
3 volume. And with the technology at the state  
4 that it is, I mean, we've done analysis, like I  
5 mentioned. If we were to be flying with a  
6 helicopter that northeastern Pennsylvania  
7 system for 10 years and only found one leak,  
8 the emissions that we would've generated from  
9 even beyond the cost, the emissions we would  
10 generate from flying a helicopter across an  
11 area the size of the state of Rhode Island  
12 would dwarf the volume that we would've  
13 detected and mitigated by finding that leak.

14 And so I really do think it's cost-  
15 benefit. Like, are we targeting the effort  
16 towards where we will have the greatest impact  
17 and that's why we're starting with those areas  
18 where we can most efficiently attack the  
19 largest diameter, the largest volume potential  
20 sources of emissions. I mean, the reason why  
21 we have this on the transmission system is  
22 there are vastly larger emission sources on

1 transmission than there are on gathering. Now,  
2 it happens to be from operational conditions  
3 primarily. We'll talk about that on  
4 classification. But it really isn't just cost.  
5 It's what's practical for the benefit that  
6 we're getting. And that's why we're proposing  
7 to start, you know, with the where you have the  
8 greatest impact on a volume and a size  
9 perspective. Thanks.

10 MR. DANNER: So what I'm hearing in  
11 this conversation so far is, if I can look at  
12 the proposal that Chad put up there, I think  
13 that there is nervousness around providing the  
14 bullet point that says, provide an exclusion  
15 for small operators. And it sounds like there  
16 is probably some room here with regard to  
17 implementation timelines for small operators.  
18 And I'm just throwing out an idea; I'm not  
19 throwing out language.

20 But just something along the lines  
21 of PHMSA may consider delayed timelines for  
22 other Type C gathering lines if it determines

1       that current technology for leak detection is  
2       not developed or is not cost-effective or may  
3       not result in detection of significant methane  
4       leaks, something along those lines.     So in  
5       other words, there's no exemption, but we can  
6       tell PHMSA to consider delayed timelines under  
7       these certain circumstances and let it figure  
8       out what is cost-effective, let it figure out  
9       what current technology works or doesn't work.  
10      And we just punt it back to them because  
11      they're really smart.

12                 Diane Burman?

13                 MS. BURMAN:   Yes.

14                 I just want to kind of level set a  
15      little bit here.  I heard two things that I'm  
16      just not sure that I fully agree with or  
17      understand.  Well, we're really talking about  
18      timing and how much time to give.  And then the  
19      second thing I heard was, well, we're really  
20      only talking about costs.  I don't think that  
21      those two things are sort of the be all and end  
22      all from a siloed perspective.  I think it's

1 larger than that.

2 I think that we first have to  
3 recognize what we can agree with, which is, we  
4 all can agree with that there are legal  
5 concerns. We may sit differently on where that  
6 is, but we all recognize that there are legal  
7 concerns that will have to play itself out, but  
8 that we have to be cognizant of that we don't  
9 want regulatory uncertainty from some of the  
10 legitimate legal concerns however they are  
11 addressed. The second is that we do recognize  
12 that within that, legal concerns, PHMSA will  
13 also have to look at whether or not a separate  
14 rulemaking is appropriate. Separate doesn't  
15 matter really what we say; that's something  
16 that they should legitimately have to look at  
17 regardless in terms of what we might be putting  
18 forward.

19 I do think that we all can agree  
20 that we need to ensure we have a prudent  
21 implementation that takes into account what the  
22 appropriate timelines are and takes into

1 account what the costs are, but more  
2 importantly, what some of the unintended  
3 consequences are. So if we set up a system  
4 and, you know, I'm not on the ground to  
5 understand, you know, how many times you're  
6 going to have a flyover, the unintended  
7 consequences are, one, it may not be able to be  
8 done in certain areas; two, by doing that, we  
9 may actually have more environmental concerns  
10 for little benefit or not, depending on where  
11 you are.

12 And so for me, what I'm kind of  
13 hearing is that what are the ways that we can  
14 understand that this is not a static situation?  
15 Technology may progress enough that by the end  
16 of the day, all of this is for not, right? But  
17 whether that's today, whether that's in a year,  
18 whether that's in 10 years, whether that's in  
19 20 years, we just don't know. What we do need  
20 to do is to encourage the facilitation of  
21 appropriate resources to find the technological  
22 solutions and to help with the approaches to do

1       some of this.

2                   And I think, Erin, your concern as I  
3       hear it is also, you want to make sure that  
4       we're encouraging people to move fast as  
5       appropriate rather than just moving to the  
6       lower standard. And so how do we do that in a  
7       way that is helping, but it's not a one size  
8       fits all? We do have to recognize that the  
9       larger operators may be able to handle things  
10      better than the smaller operators. And even  
11      within all that, there's a lot of subsets.

12                  I think all of this is trying to put  
13      forward some of our best thoughts. But for  
14      every operator working with the regulator, both  
15      at the state and the federal, there's going to  
16      be needing to look at, what does this look like  
17      from a pilot perspective? How we work on  
18      something initially, we may learn why now it's  
19      important to look at it differently, to now  
20      we've gotten it right. We've figured it out,  
21      better technology, better resources, better way  
22      of handling it. And now we can move to the

1 second phase. So I'm not opposed to a phased-  
2 in process because I think that that's  
3 literally how regulation and the market needs  
4 to be to get it right as we go forward.

5 So I'm trying to figure out what's  
6 the common ground to get us back to, not just  
7 voting on Option 1, Option 2, Option 3, and  
8 Option 4, you know, but really more what is it  
9 that we have as a framework that's giving us  
10 the tools that's then giving PHMSA the tools to  
11 decide, based on all that you're hearing, what  
12 makes sense because it's really important that  
13 we look carefully at ensuring that we're moving  
14 forward. And the word I keep hearing, at  
15 least, is practical. Is it practicable? Is it  
16 sustainable? Is it setting it up for a prudent  
17 timeline with some appropriate phase-in, maybe  
18 it's phase-in in time, maybe it's phase-in in  
19 different avenues, maybe it's phase-in of the  
20 size of the operator. All of these factors  
21 have to be looked at in a more holistic way.  
22 So that's kind of where I'm coming from from

1        what I'm hearing. So I don't know if that's  
2        helpful or not, but --

3                    MR. DANNER: All right. Thank you  
4        very much.

5                    All right. Andy, then Arvind, then  
6        Erin.

7                    MR. DRAKE: Andy Drake, Enbridge. I  
8        appreciate Commissioner Burman's comments.  
9        Those make a lot of sense. I think what we're  
10       trying to do is set constraints in, you know,  
11       some, sort of, construct of a discussion and  
12       the path to get there. And I think binary is  
13       not a good path. All or none, right now and  
14       not now, ever, those are not healthy. We  
15       didn't do that on integrity management. I  
16       think we should be very careful about trying to  
17       do that here.

18                    And when we started out integrity  
19        management, the conversation was about this is  
20       what integrity management is. This is what we  
21       want to accomplish. And we started off how to  
22       manage it, and then we said HCAs. We didn't

1 say we weren't going to do the rest of the  
2 system. We want to start somewhere. We want  
3 to get going and get programs in place and then  
4 start moving with the Prieto proposition to add  
5 value as quickly as possible.

6 To your point, Commissioner Danner,  
7 I think that the small operators, again, it was  
8 not intended as an inclusion or an exclusion; I  
9 think it is intended as just data to how do you  
10 phase. Well, Prieto. Go after the big  
11 operators and get them in here quickly. And  
12 then maybe you stage a second tier for a small.  
13 And there's a precedence to that. If I  
14 remember right, the liquid rule so many years  
15 ago set a threshold of 500 miles. So operators  
16 bigger than 500 miles, they were in. Operators  
17 that came in that were smaller than 500 miles  
18 came in a second year, a second phase. And I  
19 think those kind of tools will be helpful to us  
20 figuring out how to address these different  
21 constraints.

22 I do think that the technology issue

1 is real. It is a limitation of practicability.  
2 To do matrix flying over the entire state of  
3 Texas isn't going to work. That's not going to  
4 work. Then you got to do it over Tennessee.  
5 Then we got to do it over Pennsylvania and then  
6 New York. I mean, that would just be matrix  
7 flying over the entire United States with  
8 aerial patrol. That is not practicable. We're  
9 going to have to find another technology to do  
10 that.

11 So what is that technology? What  
12 are those thresholds? How does that work? How  
13 do we ramp that in? And I think that is very  
14 congruent with how we looked at integrity  
15 management over the last two decades is, you  
16 know, we're going to try to figure out how to  
17 do this more practically. We were starting to  
18 do cracks with hydrostatic testing, if you  
19 remember, back 20 years ago. Well that's  
20 tough, but we did it until we got the  
21 technology there to deploy inline inspection  
22 tools, which we do now for crack management.

1 So I think there's some precedences we want to  
2 try to use here to break this down.

3 MR. DANNER: All right. Thank you.  
4 Arvind?

5 MR. RAVIKUMAR: I want to make two  
6 points, and I fully agree with Chad's comment  
7 about the cost-effectiveness of methane  
8 mitigation. Now, I've run dozens of field  
9 campaigns in the country, and I know how  
10 expensive it can get very quickly when you  
11 start doing these measurements. One of the  
12 things we haven't talked about is a key  
13 component of cost-effectiveness is a survey  
14 frequency. Perhaps one way to think about it  
15 is for the larger diameter pipelines, you can  
16 do it at a more frequent survey. For smaller  
17 diameter pipelines we can do less frequent  
18 surveys, like once in three years or once in  
19 five years, like we did during our discussion  
20 for the distribution segments.

21 My second point is that Chad is  
22 right in that large diameter pipelines tend to

1 have larger volume leaks. But that does not  
2 mean the probability that any given pipeline  
3 will leak depends on the diameter. Even  
4 smaller pipelines can leak. It's just that  
5 when they leak, they'll have smaller volumes.  
6 Thank you.

7 MR. DANNER: All right. Thank you  
8 very much. Erin?

9 MS. MURPHY: Thanks.

10 I think one thing that might be  
11 helpful for me is if we could display Option 2,  
12 I believe, from the last discussion just to  
13 sort of be clear where I'm coming from. I  
14 believe this was the option that I had largely  
15 put forward at the end of the last meeting.  
16 And this is really to reiterate full inclusion  
17 of Type C gathering lines under leak survey and  
18 repair standards and to recommend that PHMSA  
19 evaluate and, you know, consider a future  
20 rulemaking for leak survey and repair standards  
21 for Type R gathering lines. And I wanted to  
22 put that up and make that point to just

1 emphasize that, you know, the publicly  
2 available information and the understanding  
3 that we have of this infrastructure is that gas  
4 gathering pipelines, including the more rural  
5 pipelines, are a significant source of methane  
6 emissions from leakage around the country, and  
7 that it needs to be a priority for PHMSA and  
8 for the public and for industry to be thinking  
9 about how to mitigate those emissions.

10 You know, what is that phase  
11 approach? What does that look like? Well,  
12 PHMSA spent 10 years completing a rulemaking on  
13 gas gathering pipelines. During that period of  
14 time, you know, that infrastructure has  
15 expanded as hydraulic fracturing has continued  
16 to expand across the United States. And we've  
17 also gotten a better understanding through the  
18 more recent survey campaigns of what the impact  
19 of that infrastructure is.

20 PHMSA, you know, spent a lot of time  
21 to create these carefully defined regulatory  
22 categories, including Type C. And so I think

1       that, you know, further sort of parsing, we  
2       could create categories into infinity, right?  
3       We could have Type C1 and 2 and 3. But that's  
4       really making this more and more complex, I  
5       think, in one hand for operators in terms of  
6       determining compliance, also for the public, in  
7       terms of understanding what standards apply to  
8       a given pipeline that might be running through  
9       their backyard or their community. So rather  
10      than breaking things up, you know, it's what  
11      PHMSA determined in the proposed rule to have  
12      leak survey and repair standards apply  
13      universally to Type C. And then the other  
14      category that the agency has already created,  
15      Type R, which I want to note that, you know,  
16      from our perspective, there's a lot of  
17      information on the table to apply leak survey  
18      and repair standards to Type R gathering lines  
19      now, but for the GPAC to recommend that PHMSA  
20      evaluate that infrastructure for a future  
21      rulemaking.

22                   Another point I wanted to flag as

1 we're talking about sort of cost and impact is  
2 we have some more data now on incidents on  
3 gathering pipelines since that reporting has  
4 come into effect. And just since 2022,  
5 operators have reported 86 incidents on all gas  
6 gathering lines have been reported to PHMSA.  
7 Five of those incidents were on Type A or B  
8 pipelines, 43 of those incidents were on Type C  
9 pipelines, and 38 were on Type R pipelines.  
10 And total, those incidents have cost operators  
11 and communities over \$30 million in property  
12 damage, emergency services, product loss, the  
13 impacts of an incident. So compared to Type A  
14 and B gathering pipelines, we see that most of  
15 the incident costs are associated with Type C  
16 or Type R pipelines. And Type C pipelines in  
17 particular made up nearly half of all of the  
18 incident costs from 2022 to present. It was  
19 about \$14 million out of the over \$30 million  
20 of total incident costs.

21 There's also some information that  
22 PHMSA shared earlier on leaks. I'll just

1 briefly flag, and I talked about some of this  
2 at the last meeting. But it's been a while, so  
3 I do want to bring it up again, that the data  
4 that we've seen reported by gathering operators  
5 showed on Type R pipelines, which are not  
6 subject to any leak survey or repair standards  
7 by PHMSA, operators voluntarily reported over  
8 4,300 leaks in 2022 that were found and fixed,  
9 which is fantastic. That shows, you know,  
10 leadership by operators who are managing this  
11 infrastructure responsibly, identifying leaks,  
12 fixing them, and voluntarily reporting that  
13 information to the agency. And that was only  
14 87 out of the 466 operators of Type R lines.  
15 So again, you know, leadership by some members  
16 of industry, but also shows you how many more  
17 leaks are out there on those lines that just  
18 haven't been identified or reported yet.

19 So thinking about, you know, that  
20 data point and then what we were talking about  
21 earlier that the leaks that have even been  
22 reported on the Type C gathering pipelines are

1       likely for a smaller subset, not all 90,000  
2       miles of lines because we don't expect that all  
3       operators are voluntarily doing leak survey and  
4       repair at this point. We don't know, right?  
5       Like, we can't say exactly what the extent of  
6       methane emissions or leaks are on Type C in  
7       particular, but we have to work with the  
8       information that we have. And I think, you  
9       know, our knowledge of the extent of methane  
10      emissions, the incidents that we've seen  
11      occurring, particularly on the Type C and also  
12      the Type R lines at that higher rate, really  
13      indicates the importance of moving forward,  
14      supporting, I would say, the proposed rule that  
15      fully covers Type C.

16               There's one other point I wanted to  
17      make since it seems like we're starting to have  
18      a conversation about smaller operators. So I  
19      was taking a look, and I think if I understood  
20      correctly, earlier in the discussion, Chad was  
21      referencing smaller operators as those who have  
22      under 500 miles of Type A, B, and C combined.

1 So I just was taking a look at that from the  
2 information that's been reported. And one  
3 thought that comes to mind and concern that  
4 comes to mind for me when we think about, like,  
5 breaking off smaller operators, is some of the  
6 operators who have reported under 500 miles  
7 include Kinder Morgan Texas Pipeline Company,  
8 Shell, Targa Northern Delaware, LLC, Targa  
9 South Texas CCMG Gathering. You see some  
10 companies that I am not, you know, perfectly  
11 knowledgeable about the pipeline industry, but  
12 you see Fortune 500 companies, you see large  
13 operators.

14 So I guess one thing that I think is  
15 really important is if we're talking about, you  
16 know, a really small operator that might need  
17 more time to stand up a leak survey and repair  
18 program, to me that needs to be, what is a  
19 really small operator? That needs to be really  
20 carefully defined. And also thinking about,  
21 well, any operator that already owns and  
22 manages Type A and B gas gathering pipelines,

1 if they are in compliance with federal  
2 standards, they should already have a leak  
3 survey and repair program in place, which  
4 obviously would have to be extended to their  
5 Type C lines if they haven't already done that.  
6 But I think standing up the program is, you  
7 know, a step for operators. And so for those  
8 who have already done it, it's a lot less of a  
9 hurdle.

10 I know that was a lot of points.

11 Thanks, everyone.

12 MR. DANNER: All right. Thank you.

13 Alan and then Chad. And then we  
14 might take a break because we're getting on  
15 time.

16 Oh. Chad, go ahead.

17 MR. ZAMARIN: Okay. Chad Zamarin,  
18 Williams. Thanks.

19 And Erin, thanks for that. I do  
20 want to be clear. We aren't, in our proposal,  
21 talking about creating new subsets or new  
22 categories. We were using existing categories

1       that were created for this very purpose to  
2       extend requirements, regulatory requirements in  
3       a way that phases in, recognizing that there  
4       are practical limitations on what we can do for  
5       different types of pipelines for the benefits  
6       that we would be able to capture. And so I  
7       want to make that clear.

8               And I'll give you an example. I  
9       know we talk a lot about emerging technology,  
10      and it's great and it's exciting. But, you  
11      know, we're one of the few operators. We've  
12      actually launched satellites that we're trying  
13      to use to monitor our infrastructure. It's  
14      been six months, and we're still trying to  
15      calibrate the equipment in outer space. I  
16      mean, we're not talking about practical  
17      solutions today for pipeline systems. They're  
18      coming, and I think that they will evolve over  
19      time and hopefully become more accessible. But  
20      there are just practical limitations on what we  
21      can do today. And so I do think it's  
22      important.

1 I mean, if you're proposing Option  
2 2, I can tell you that as an operator, I can't  
3 support all Type C and all Type R. It is not  
4 practical. It will just not work. And so, I  
5 mean, I'm happy for us to vote on that proposal  
6 if that's the plan, but I just don't think it  
7 works.

8 And so we're not trying to say that  
9 we don't want to extend this to gathering  
10 systems. We're saying, like we've done in  
11 other regulatory frameworks, do it in a way  
12 where you extend to where the benefit is  
13 greatest first. PHMSA can always, you know,  
14 promulgate additional regulations as we learn  
15 from that first largest chunk of pipelines that  
16 come under the regulations, get that experience  
17 so that we're not doing everything everywhere  
18 all at once in a way that totally, you know,  
19 disrupts the whole energy value chain. Thank  
20 you.

21 MR. DANNER: All right.

22 Alan Mayberry?

1                   MR. MAYBERRY: I was going to say,  
2                   thank you for the amazing discussion. I would  
3                   suggest we take about a 15-minute break. And  
4                   if the Committee could consider any  
5                   modifications to the voting language we have,  
6                   but come back ready to discuss any  
7                   modifications and have a bit of discussion as  
8                   we come back and then try to close out on this.

9                   I think the public record you've  
10                  established is, you know, quite good for us. I  
11                  think we're ready to get your recommendation,  
12                  whether it's unanimous or not, and then move  
13                  from there. But I think we definitely hear all  
14                  of the sides. But you know, with that, I'll  
15                  turn it back to you.

16                 MR. DANNER: All right. Thank you.

17                 So it is about five after, and let's  
18                 take a 15-minute break. We'll be back at 20  
19                 after.

20                 (Whereupon, the above-entitled  
21                 matter went off the record at 10:05 a.m. and  
22                 resumed at 10:44 a.m.)

1                   MR. DANNER: All right. We're back  
2 from our short 10-minute break. All right. I  
3 think people have had time to talk. We have  
4 some options that we've had up on the board. I  
5 wonder who would like to start our discussion.

6                   MR. MAYBERRY: Okay. John is going  
7 to put some language up. Just bear with us.  
8 All right. Who has observations about the  
9 cherry blossoms? Yeah. While we're waiting,  
10 there's the option of ordering lunch from the  
11 hotel. So if you didn't fill in your card, do  
12 so and you desire that option. There's another  
13 obscure option we didn't mention last time, but  
14 Costco is about a 10-minute walk away. So if  
15 you want to go to Costco and get a \$1.50 hot  
16 dog and a soda, that's an option as well.

17                  MR. DANNER: Yeah. Bear with us.  
18 We're preparing some voting language.

19                  All right. Sara Gosman, I believe  
20 this is language that you were sponsoring?

21                  MS. GOSMAN: Yeah. Thank you very  
22 much. So this is a variation of Option 2 that

1 attempts to get at some of the issues that  
2 we've been talking about, but very importantly  
3 keeps Type C gathering in this rulemaking. So  
4 I think there are some considerations that  
5 PHMSA can work with here, which includes  
6 alternative survey frequency, you know, just  
7 the general set of issues around compliance  
8 timelines. And we've had a robust discussion  
9 here as well as we have public comments,  
10 stakeholder perspectives that the agency can  
11 pull from in thinking about compliance  
12 timelines.

13 And then I think we continue to want  
14 to raise the issue of Type R as being part of  
15 the methane emissions problem. And so we would  
16 want the agency to consider evaluating the  
17 appropriateness of extending those requirements  
18 based on data and the current state of  
19 technology into a future rulemaking, but not in  
20 this rulemaking. So again, I think our  
21 perspective is it's important to keep Type C  
22 in. I think we are in a place where we know

1       that there is a general set of issues here as  
2       it relates to leaks from Type C pipelines. We  
3       know that this is a significant part of our  
4       methane emissions from our pipeline systems  
5       that we need to address.

6               I think that PHMSA has the tools and  
7       capacity to understand some of the cost-  
8       effectiveness issues that have been raised by  
9       the industry members here on GPAC. And I think  
10      it should go back to the expert agency to work  
11      with those, as well as the very important goal  
12      here of addressing and mitigating climate  
13      change. I think at the end of the day, we need  
14      pipeline systems that don't leak, that that's  
15      part of the social license of what it means to  
16      be an operator in a world in which we are  
17      facing dramatic changes based on climate  
18      change.

19             MR. DANNER: All right. Thank you.

20             Are there comments or questions with  
21      regard to this proposal?

22             Andy Drake?

1 MR. DRAKE: Andy Drake, Enbridge. I  
2 appreciate you taking the shot here. I think  
3 we're all trying to figure out how to put our  
4 arms around this. And not like this is a menu,  
5 but I think one thing that helped in the  
6 integrity management discussion was a statement  
7 of intent and direction. Where do we want to  
8 go and be? And I think, you know, in this,  
9 what I sense that we agree on is that we want  
10 to extend leak detection to distribution,  
11 transmission, and the gathering that's  
12 jurisdictional to PHMSA, you know, the Type C  
13 gathering, A, B, C gathering. I think that's  
14 an important guidance to PHMSA. That is our  
15 goal.

16 Just like we said, with integrity  
17 management, we want to deploy integrity  
18 management to all the assets, okay? That's  
19 kind of where we are here. And I think that  
20 that's an important statement, too. So then  
21 the question becomes, how do you get there?  
22 Like, okay. And we've kind of talked through,

1       there's different degrees of maturity, and  
2       there's different things that are probably  
3       having a bigger influence on the methane  
4       picture. We don't have clear data. Actually,  
5       we all tread carefully in that space because we  
6       aren't as well-informed as we would like to be,  
7       which is actually guidance to PHMSA that we  
8       need better data on some of this so we make  
9       better choices.

10               But based on the data that we have,  
11       we're saying big pipes, big things that look  
12       like transmission, they already have programs  
13       in place. They're already starting to do some  
14       monitoring. Those should be in now. It's the  
15       first phase anyway.

16               I would say that the small operator  
17       thing, I wouldn't overemphasize that too much.  
18       I think that's more of they're coming. They  
19       just may need a little bit more time. So they  
20       would be in this requirement as well.

21               Where I sense the disconnect between  
22       us right now is the practicability of doing the

1 current technology of aerial survey on, in  
2 essence, the 70,000 miles of additional C. And  
3 I think that that is a significant issue that's  
4 differentiating between us is that there's a  
5 position that you're holding that the  
6 technology is there. And I would not argue  
7 that. The technology is there, and it does  
8 work. It's just the question of practicability  
9 of doing matrix flying over the entire United  
10 States to cover all of C.

11 And that's where I'm struggling.  
12 We're going to have to find a technology to  
13 effectuate that that I don't think exists right  
14 now. And so how do we make space for that to  
15 happen? So that's my concern is really that  
16 we're putting all of C in there, knowing, in my  
17 opinion, that the technology we currently have  
18 available is not practicable to do that.

19 MR. DANNER: Is there language that  
20 identifies technology? I mean, is there  
21 language that you could insert into this that  
22 would mitigate some of your concerns or address

1 some of your concerns?

2 MR. DRAKE: You want me to respond?

3 MR. DANNER: You may. The question  
4 is to you.

5 MR. DRAKE: Okay. Thank you. I  
6 just don't want to violate any of our rituals  
7 or order here.

8 Andy Drake, Enbridge. I, too, have  
9 great confidence in the regulator, and I think  
10 that how much sausage making we actually want  
11 to get into we should be very careful about.  
12 That's why I think it's important to set a  
13 goal. Our goal is to get these assets in here.  
14 Here's some constraints. Here's some things  
15 we're thinking about. We got to figure this  
16 out. And I think that, you know, to put some  
17 language in there that says to PHMSA, you  
18 should continue to study technologies to help  
19 make it practicable to do beyond this, you  
20 know?

21 And I know that's not up here, but  
22 the mileage that Chad was proposing is I think

1 very confidently doable. And I think we can  
2 pass the red face test on the vote of, is this  
3 practical, reasonable, or cost-efficient? Yes,  
4 to put that in there. The next tranche is  
5 where I can't say it's practical, reasonable,  
6 and cost-efficient. So do we defer to PHMSA?  
7 Well, keep looking for technologies to figure  
8 out how to do this and then deploy that  
9 requirement when that technology becomes  
10 practical. I really don't have a big problem  
11 with that. So that's the difference that I  
12 sense between where you are and where I am  
13 right now.

14 MR. DANNER: All right. Thank you.  
15 Arvind, and then Chad.

16 MR. RAVIKUMAR: Arvind Ravikumar,  
17 University of Texas. I think Andy's point  
18 that, you know, if you suddenly have a  
19 requirement of doing 100,000 miles tomorrow,  
20 that's going to become challenging, not just  
21 about, you know, whether the technology can do  
22 it, but whether the technology is available

1 just because of scaling up in such a short  
2 time. But I think we cannot separate the  
3 technology and the total mileage covered from  
4 the survey frequency component of it.

5 For example, if you say that, you  
6 know, you have to survey all Type C pipelines  
7 once every five years and the rule becomes  
8 effective starting in 2025 or something, we are  
9 talking about one survey of all Type C  
10 pipelines by 2030. So it's not tomorrow.  
11 There's going to be seven years that you have  
12 to finish one survey of all Type C pipelines  
13 that would start with 20 percent on average of  
14 the total pipeline in 2025 or 2026. That's not  
15 a significant imposition. So there's a phased-  
16 in approach. And so we want to sort of discuss  
17 together about how the technology issues that  
18 Andy raised, which are real, can be combined  
19 with a survey frequency parameter to make it  
20 practicable over the next five, six years; not  
21 five, six months.

22 MR. DANNER: Thank you. Chad?

1 MR. ZAMARIN: Thanks.

2 Chad Zamarin, Williams. And I know  
3 we just took a break, but we may need to --

4 MR. DANNER: I liked what you said.

5 MR. ZAMARIN: Yeah. I do appreciate  
6 the idea. And you had asked Chairman about the  
7 language up here. We've tried really hard over  
8 the last several months to canvass the  
9 operating industry to understand what's  
10 practicable. And in annual surveys of 90,000  
11 miles of pipelines that have not been  
12 regulated, the vast majority of which are  
13 smaller diameter and not close to people, is  
14 not practicable. And so that's why we had come  
15 up with the proposal that we had that said a  
16 subset of that we do believe, as we canvassed  
17 the operators and understood the current state  
18 of technology and what could be accomplished,  
19 that that is practicable.

20 Is there some other frequency that  
21 might work for pipelines beyond that subset  
22 that we identified that could work for annual?

1       There could be. I think we would need to,  
2       again, do a little bit of work with some of the  
3       operators that are here. But that's the issue  
4       that we have with this kind of language that  
5       says we're going to extend to all Type C. I  
6       mean, recall, we were at no Type C was kind of  
7       a position and everything included. We're  
8       trying to figure out a way to work our way in  
9       and over time extend further kind of as we can.  
10      Thank you.

11                   MR. DANNER: Thank you. Alan?

12                   MR. MAYBERRY: Is there some  
13       alternative language we could get up on the  
14       screen? I mean, we have this option here now.  
15       I'm just --

16                   MR. ZAMARIN: Yeah.

17                   MR. MAYBERRY: -- seeing so we have  
18       --

19                   MR. ZAMARIN: Sorry. Yeah. You  
20       know, it's really a new Option 1 and 2 perhaps.  
21       But yeah. Chad Zamarin with Williams. Yeah.  
22       Sorry. Our option was basically taking the

1 language on Type C that defines on Option 1 the  
2 phase in approach to mean the pipe -- it was  
3 put up as an Option 3, but we would propose  
4 just adding that criteria to Option 1, and then  
5 the rest of the Option 1 language kind of  
6 addresses this idea of a phased-in approach.

7 MR. MAYBERRY: Okay. Let me put  
8 that up.

9 MR. ZAMARIN: I know you had an  
10 Option 3 up there, but it wasn't meant to be  
11 that.

12 MR. DANNER: And I guess now it's  
13 Option 5.

14 MR. ZAMARIN: It's complicated. No.  
15 Oh, wait a minute. Okay. Whew. We've got  
16 five options. And in the spirit of trying to  
17 get something done, I would remove the  
18 exception for smaller operators. I think PHMSA  
19 can always look at those things, but what I'm  
20 trying to focus us on is big pipe, big volumes.  
21 That should be, you know, subject to big  
22 regulations. You know, to Andy's point: If it

1 walks like a duck, if it quacks like a duck,  
2 you know, it's a duck. So the idea that if  
3 it's greater than 16 inches in diameter or 8 to  
4 16 inches in proximity to a building intended  
5 for occupancy.

6 MR. DANNER: All right. Erin  
7 Murphy?

8 MS. MURPHY: Thanks.

9 Erin Murphy, EDF. I think from my  
10 perspective, the very important starting point  
11 is that PHMSA has proposed that leak survey and  
12 repair standards apply to Type C gathering  
13 lines, and it's appropriate for PHMSA to  
14 finalize that, and therefore, in my opinion,  
15 appropriate for this committee to recommend  
16 support for that. I think the place for  
17 flexibility and making sure that, you know,  
18 industry is able to satisfy leak survey and  
19 repair comes in when we talk about what does  
20 the frequency look like for smaller diameter  
21 Type C? What does the compliance deadline look  
22 like when different parts of industry are

1 expected to come into compliance with this  
2 standard?

3 To me, excluding certain diameters  
4 entirely from leak survey and repair standards  
5 just doesn't make sense right now. We know  
6 that there are leaks on Type C gathering  
7 pipelines. We know that the measurement  
8 technologies are commercially available. I'm  
9 hearing some reactions to that idea that I  
10 haven't heard previously. But from all of the  
11 folks in the field that I've spoken with, I  
12 also was trying to look back at the public  
13 comments that were given a long time ago now.  
14 I know there were some technology providers  
15 that gave public comment on their readiness to  
16 start, you know, implementing these surveys for  
17 operators. So I think it's very clear that  
18 Type C should be subject to leak survey and  
19 repair standards and then think about what  
20 those flexibilities look like to enable  
21 compliance.

22 MR. DANNER: All right. So I'm

1 going to pretend my own card was up. I just  
2 feel like we're backing away further because I  
3 see now we're doing implementation timelines on  
4 ones that I thought were actually squarely  
5 inside the rule in the earlier proposals. I  
6 mean, I think that earlier today, you  
7 identified those that you said should be  
8 covered. And then, you know, the proposal was,  
9 what do we do with the remaining? And you  
10 said, well, separate rulemaking. But I think,  
11 you know, that's where the delayed  
12 implementation can be. And that's where PHMSA  
13 can determine based on technology, based on  
14 cost-effectiveness, based on other factors,  
15 what the appropriate timelines are.

16 But you've taken the language out  
17 about exemptions. But now we're considering  
18 separate rulemaking. So I'm struggling with  
19 this. I kind of liked the Option 3 better with  
20 adding implementation timelines for those  
21 assets that were not covered in your original  
22 description.

1                   So my own feeling on Option 5 is  
2                   you're moving backwards, not forwards. And I  
3                   would like us to kind of go back to number 3  
4                   and sort of, again, focus on what's in, what  
5                   will be in the future, and give PHMSA the  
6                   discretion to determine what will be in the  
7                   future based on technology and based on cost-  
8                   effectiveness. And then we can be done. So  
9                   that's my 2 cents worth. And I'll --

10                  MR. ZAMARIN:     Can I give you a  
11                  direct response to that?

12                  MR. DANNER:    Yes, please.

13                  MR.     ZAMARIN:         Chad     Zamarin,  
14                  Williams. Thank you, Chairman Danner. I guess  
15                  I hadn't seen the language when it was all  
16                  mashed together until it just got put up on the  
17                  screen. But yeah, Option 3 is effectively, you  
18                  know, an attempt to try to simplify the  
19                  concept. In fact, the two bullets there aren't  
20                  even necessary. They were explanatory, large  
21                  bullet 2 and bullet 3.

22                  And I do have a question maybe for

1 Erin and Sara because again, I think we haven't  
2 talked about the survey frequency. But if we  
3 added Type C outside of that subset, but  
4 subject to a five-year survey frequency, would  
5 we get support from the group? Because I don't  
6 want us to be working on something that's not  
7 going to then eventually get support. But that  
8 is a concept that we have not fully vetted with  
9 the operators, but we could certainly spend a  
10 bit of time to understand if we had more time  
11 for that additional Type C mileage.

12 Is that something worth working on?  
13 I think we would like to know if that'll get us  
14 full support.

15 MR. DANNER: So on this option,  
16 again, I think I would personally be able to  
17 support this option if you took out the bullets  
18 and provide an exclusion for small operators  
19 and put in the word, set appropriate  
20 implementation timelines for other Type C  
21 gathering so that it makes clear that the ones  
22 that are not covered in your description on top

1 are the ones that PHMSA should consider  
2 appropriate timelines given the implementation  
3 challenges, meaning technology and costs and  
4 other things. And that's where I would think,  
5 you know, might be the best we can do today, if  
6 we're looking for some kind of consensus. But  
7 anyway, again, just my thoughts.

8 And, Alan, did you want to step in?

9 MR. MAYBERRY: No. I want to hear  
10 from Erin and --

11 MR. DANNER: Okay.

12 MR. MAYBERRY: -- then Sara and then  
13 --

14 MR. DANNER: Erin, and then Sara.

15 MS. MURPHY: Erin Murphy, EDF. Oh,  
16 it's changing. Okay. Trying to react here. I  
17 think I was going to directly respond to Chad's  
18 question about, you know, thinking about the  
19 survey frequency for the remainder of Type C.  
20 And I think that that is the conversation that  
21 makes sense to me to have is leak survey and  
22 repair standards are applicable to Type C

1 gathering lines. What does that look like for  
2 different subsets of Type C? Potentially a  
3 different survey frequency for the smaller  
4 diameter lines I think is something that could  
5 make sense to discuss.

6 I heard you say five years. I think  
7 my first thought there is, you know, we've seen  
8 a recognition in the distribution systems that  
9 five years as a baseline is, you know, not  
10 necessarily enough to catch all of the leaks  
11 and repair them in a timely fashion, that a lot  
12 can happen in five years. And we've seen  
13 movement there to annual and to three years for  
14 the remainder of distribution systems. Then  
15 I'm thinking about, you know, what sort of the  
16 starting point is that PHMSA has proposed is  
17 applicable to gathering pipelines, which is the  
18 transmission pipeline frequency standards,  
19 which are twice a year or four times a year,  
20 depending on the location. So I'm kind of  
21 reacting and can give that some more thought.  
22 But I think, you know, hopefully there's room

1 for a conversation there.

2 MR. DANNER: Sara?

3 MS. GOSMAN: Yeah. Thanks for the  
4 Hail Mary pass. And I think we would like to  
5 have further discussion about the survey  
6 frequency, but we are open to a longer survey  
7 frequency. I mean, I think if the conversation  
8 we're having right now is how do we get in  
9 those smaller diameter lines, but allow for  
10 more time in order to be able to survey them so  
11 that we really know what's going on these  
12 systems, I think that's the conversation I  
13 would love to have. And I think that we could  
14 have that conversation about survey frequencies  
15 to extend to five years.

16 MR. DANNER: All right.

17 And just, again, my own weighing in,  
18 take out the last bullet, and I'm good with  
19 this option.

20 So Andy, and then Chad.

21 MR. DRAKE: Andy Drake, Enbridge. I  
22 appreciated your point, Arvind. I think that

1 really helped change the paradigm and  
2 practicability of this aerial discussion, you  
3 know, on the 70,000 miles beyond what we talked  
4 about.

5 I agree with you, Chairman Danner,  
6 that I think taking out the exclusion on the  
7 small operators, it was never intended as an  
8 exclusion. It was, in turn, intended as a  
9 differentiation. And I think to differentiate  
10 them and give them more time to get programs  
11 set up is appropriate. They're not out. They  
12 just need some time to get ready. Fine.

13 And I think talking about frequency  
14 creates more practicability of the current  
15 technology to work in this space. I still  
16 think the 22,000 miles is a duck, and it should  
17 come in without an extended so to speak  
18 frequency. But I think if those kind of  
19 tenants seem to be a pallet of things that are,  
20 you know, workable for everybody on the table,  
21 it would probably help if Chad and I in  
22 particular could take a break, go see where the

1 rest of an industry is that's learning on a  
2 vertical curve here as well.

3 But is that kind of a pallet of  
4 things that seems to address concerns?

5 MR. DANNER: I'm sorry. Sara, I  
6 think Andy was directing that towards you. So  
7 please.

8 MS. GOSMAN: Thank you.

9 No. That was my understanding as  
10 well. So yes. I think that what we are  
11 willing to do here is to see an extended  
12 timeline for a survey frequency for smaller  
13 diameter pipelines with the understanding that  
14 they are in this rulemaking, that is that we  
15 ultimately want them to be part of this program  
16 and not have them be in a separate rulemaking.  
17 I think with that understanding, you know, if  
18 that's a conversation that you feel like would  
19 be fruitful, I think we should take a break and  
20 check in.

21 MR. DANNER: All right. Chad?

22 MR. ZAMARIN: Thanks.

1 Chad Zamarin, Williams. Yeah --

2 MR. DANNER: Oh, I'm sorry. Diane,  
3 sorry. I didn't see your --

4 MR. ZAMARIN: I yield.

5 MS. BURMAN: No. I do appreciate  
6 sort of what I think is the good faith trying  
7 to work through this. So I think we're needing  
8 that. So I support that as well.

9 MR. DANNER: All right. Chad?

10 MR. ZAMARIN: Chad Zamarin,  
11 Williams. I think it would be good if we could  
12 take a break. That's what I was going to say.  
13 Thanks.

14 MR. DANNER: All right.

15 So 10 minutes. We'll be back in 10  
16 minutes. And I mean it.

17 (Whereupon, the above-entitled  
18 matter went off the record at 11:11 a.m. and  
19 resumed at 11:32 a.m.)

20 MR. DANNER: Okay, folks. We're  
21 going to get going. All right. We are back.  
22 We have a proposal up on the screen.

1                   Who would like to comment? Chad  
2                   Zamarin?

3                   MR. ZAMARIN: I'm going to give it a  
4                   shot, although Sara is not back yet. But I  
5                   think the conversation that we had and the  
6                   concept of, like, with integrity management,  
7                   you know, we have seven-year reassessment  
8                   intervals for inline inspection tools,  
9                   recognizing that it's a lot of mileage. It's a  
10                  resources issue. So I would be comfortable  
11                  with that second bullet basically saying that  
12                  we will extend on an annual survey basis the  
13                  first subset, the large diameter, greater than  
14                  16 inch. And then for the remainder of Type C  
15                  gathering, which is an additional 70,000 miles,  
16                  that we have a five-year, 10-kilogram-per-hour  
17                  survey frequency. And that's kind of where we  
18                  ended.

19                  MR. DANNER: So you would amend the  
20                  second bullet?

21                  MR. ZAMARIN: Yes.

22                  MR. DANNER: All right. Reaction?

1                   MR. ZAMARIN:     And then you can  
2     remove the last bullet because that covers all  
3     Type C gathering.

4                   MR. DANNER:   Erin Murphy?

5                   MS. MURPHY:   Thanks.

6                   Erin Murphy, EDF.   Just clarifying  
7     questions to make sure I understand.   So you're  
8     suggesting supporting the extension of advanced  
9     leak detection and leak survey and repair  
10    standards to all Type C and then recommending  
11    some specific frequency intervals for the  
12    different sub parts within Type C?   And I think  
13    you said 16 inches or greater diameter would be  
14    at an annual frequency, and then the remainder  
15    of Type C would be at an every five-year  
16    frequency?   Am I understanding that correctly?

17                  MR. DANNER:   Chad?

18                  MR. ZAMARIN:   Yes.   Annual for the  
19    Type C described in bullet 1 and five year for  
20    all other Type C.   And just to give a little  
21    bit of perspective, I mean, the conversation  
22    that we had in sidebar, we will basically, as

1 an industry, need to establish an entire,  
2 frankly, industry around this process. And so  
3 the timeline is important. I think, you know,  
4 we didn't figure it out during the break, but  
5 you will likely have programs that will require  
6 entire state surveys that will happen across  
7 multiple different operators, and we'll be  
8 developing a means for us to address the fact  
9 that you saw the original maps that we  
10 crisscross pipelines. And so the idea is to  
11 allow for additional time where we're not  
12 currently having to do any of the patrol and  
13 survey work required by the code, allow for  
14 additional time and a longer interval so that  
15 those can be performed in a practical manner.

16 MR. DANNER: All right. Other  
17 reactions? Erin?

18 MS. MURPHY: Happy to let someone  
19 else jump in, but I'll continue. That is  
20 helpful to understand. I think that, you know,  
21 just from my perspective, thinking about what  
22 the proposed rule lays out as survey frequency

1 for gathering pipelines is consistent with  
2 transmission pipeline frequency, which I don't  
3 have all the charts in front of me, but is, you  
4 know, sometimes four times a year or sometimes  
5 twice a year, and I think in some  
6 circumstances, once per year on the most rural  
7 or most remote of the pipelines. So just  
8 thinking about that starting point in the  
9 proposed rule and then hearing your perspective  
10 or your position, it feels to me like,  
11 particularly for those greater than 16-inch  
12 diameter pipelines that there's a safety  
13 element. I mean, there's a safety element for  
14 all of this is the safety and environmental  
15 component.

16 The annual and then the every five-  
17 year frequency feels really wide open to me.  
18 And I'm wondering if there's any room for a  
19 more sort of frequent position. I'm thinking,  
20 and I said this earlier, you know, in the  
21 distribution sector, there's been this shift  
22 from every five years for the pipelines that

1 are outside of business districts to every  
2 three years is what PHMSA is shifting in this  
3 rulemaking or they've proposed to do. So, you  
4 know, seeing that sort of movement that the  
5 federal standard would be, that the least  
6 frequent survey on any regulated pipeline is at  
7 least once every three years, that at least  
8 feels to me like one sort of threshold to  
9 consider.

10 MR. DANNER: All right. So Chad,  
11 and then Andy.

12 MR. ZAMARIN: Thanks.

13 Chad Zamarin, Williams. Integrity  
14 management reassessment intervals are seven  
15 years. And we're talking about establishing a  
16 baseline and then reassessments on pipe that  
17 have never been regulated. I mean, the  
18 distribution industry has been regulated for 70  
19 years. The transmission industry has been  
20 regulated for 70 years. Like, there is  
21 absolutely no way we can go tighter than these  
22 assessment intervals and claim practicability.

1 I mean, these are pipelines that have never  
2 been subject to regulations before. So I think  
3 we're being extremely aggressive, frankly, in  
4 extending.

5 And I do want to highlight the  
6 benefit of what will happen here. You saw the  
7 reticulated spider web nature by requiring the  
8 flying of 90,000 miles of pipe over five-year  
9 intervals. You're going to canvass massive,  
10 you know, areas of gathering. I mean, just  
11 like with integrity management, every seven  
12 years we have to run tools for relatively small  
13 sections of pipe. We get the benefit of  
14 assessing way beyond those areas because we  
15 run, you know, long distances to cover those.  
16 So it requires, I think, a reasonable interval,  
17 and I don't see how you can go any more  
18 aggressively than this. Thank you.

19 MR. DANNER: And Andy Drake?

20 MR. DRAKE: This is Andy Drake,  
21 Enbridge. I appreciate your comments. I think  
22 we put a lot of effort in that little 10-minute

1 break there. There's a lot of very exciting  
2 conversations.

3 But I do want to be clear that the  
4 top bullet is what we've been talking about  
5 this whole time. We are bringing that 22,000  
6 miles into the same exact construct as  
7 transmission, everything. The piece that's a  
8 little bit moving, if you will, and I'm trying  
9 to minimize degrees of freedom here, everything  
10 we've been talking about for the last, you  
11 know, two weeks or whatever of this meeting in  
12 total, would apply to the top bullets, to your  
13 point of safety, all those things. That's  
14 exactly the same. No movement there.

15 The differentiation is the part  
16 beyond C represents a very different challenge  
17 to us. And so we're taking a different  
18 approach. We're going to try to do this grid  
19 flying, but to do that is not very efficient.  
20 We need time to do that.

21 I think the thing that really was  
22 compelling to me is a comment that Arvind made,

1 and that is, we just don't know. Go get the  
2 data. That's what that's designed to do. If  
3 we define that there's a lot of leaks out  
4 there, I have great confidence in PHMSA's  
5 ability to change the frequency of the  
6 inspection if it's pervasive. I don't think it  
7 is, but I think we need to gather the data.  
8 And I think that that's what this is intended  
9 to do.

10 MR. DANNER: All right. Thank you.  
11 Erin, and then Terry.

12 MS. MURPHY: Thanks.

13 Erin Murphy, EDF. So I thought I  
14 understood, and now I think I need to clarify  
15 further. I guess I'm thinking about the  
16 different components of the proposed rule and a  
17 leak survey and repair framework. There are  
18 the frequencies that are set for leak surveys.  
19 Then we have the repair timelines, which we  
20 haven't talked about in this context. And then  
21 there's the sort of ALDP. There's the  
22 technology standard for what's used in a leak

1 survey. So, you know, we're talking about what  
2 the survey frequency is, and that's one thing  
3 to discuss.

4 It is to me very important and sort  
5 of the baseline that the ALDP standard is  
6 applicable, and all Type C are subject to some  
7 leak survey and repair standard. And so I'm  
8 just realizing the way this is broken out is,  
9 and this may just be a reformatting of text  
10 rather than a disagreement, that the ALDP  
11 standard would be applicable to all Type C  
12 gathering pipelines. And then the distinction  
13 would be the survey frequency between the first  
14 group and the second group. And I think if  
15 there's agreement there, this would need to be  
16 rephrased a little bit, just to be very clear.  
17 And I know there's then, is ALDP 10 kilograms  
18 per hour? I think this committee is  
19 recommending, yes. But if that makes sense, I  
20 just want to make sure there's agreement.

21 MR. DANNER: So what I'm hearing you  
22 say is a friendly amendment might be to after

1 gathering pipelines in the first bullet, put a  
2 period, and then say for gathering pipelines  
3 that are, and then separate it that way. So  
4 that the first sentence, extend LDAR  
5 requirements for all A and B gathering  
6 pipelines, period. And then, yeah, broken down  
7 that way.

8 Is that acceptable, Chad or Andy?

9 MR. ZAMARIN: No. I think Erin is  
10 trying to clarify that we're extending to all  
11 A, B and C, but we have different survey  
12 frequencies for the subset of C and the  
13 remainder of C. And we're referencing the 10  
14 kilograms per hour. We already had discussed  
15 that in the last meeting and, I think, voted on  
16 that as the appropriate threshold.

17 MR. DANNER: Okay. Yeah. I was  
18 reading, and C into that first sentence.

19 MR. ZAMARIN: Oh, you got it. Okay.

20 MR. DANNER: Yeah. So all right.  
21 Terry, and then Erin.

22 MR. TURPIN: Thanks.

1 Terry Turpin, FERC. And the way  
2 this is written now is what I thought we were  
3 all talking about, even if the wording wasn't  
4 up there. But I would also add, I think we're  
5 trending back to the sausage-maker-type roles  
6 where we're starting to get into trying to  
7 write the code on behalf of PHMSA. And so I  
8 would just offer up, I mean, it seems like  
9 we're 90-plus-something percent there.

10 And when we get down to that last  
11 one, it seems like the last point of contention  
12 seems to be around the frequency of survey.  
13 And I would recommend that we don't try to  
14 define it. I think we yield to PHMSA. We've  
15 clearly since November had lots of discussions,  
16 you know, at this committee and all today, so  
17 far half of the day, on the various pieces that  
18 PHMSA needs to consider in determining the  
19 appropriate implementation timelines.

20 And, I mean, I think we might be  
21 able to get there if we just take out the  
22 number, and just say, you know, set appropriate

1 implementation timelines in the last two  
2 bullets and PHMSA to consider, you know, a  
3 range or something. Let's just give PHMSA the  
4 guidance and that if it looks at it in that  
5 light, then we think it was practical and  
6 implementable and et cetera, et cetera. But  
7 we're going to be here for another week if  
8 we're trying to do the numbers. Thank you.

9 MR. DANNER: We're going to have a  
10 vote before lunch. Erin?

11 MS. MURPHY: Erin Murphy, EDF. I  
12 appreciate Terry's point, and I would be  
13 interested to hear, you know, others on the  
14 committee thoughts, if that's a way to get to  
15 consensus. Just wanted to weigh in on the  
16 first bullet point. And again, I believe this  
17 is a friendly amendment. But being very clear  
18 that it's the ALDP standard at the GPAC-  
19 recommended 10-kilogram-per-hour. LDAR and  
20 ALDP I think can mean different things to  
21 folks. And the ALDP program is, you know, a  
22 big component of the proposed rule, so that

1 clarity would be helpful.

2 MR. DANNER: All right. Thank you.

3 Chad?

4 MR. ZAMARIN: Chad Zamarin,  
5 Williams. Thanks.

6 And, Terry, I appreciate your  
7 comments. I think the challenge that I would  
8 have is, again, canvassing to try to understand  
9 practicability. If we don't have some idea of  
10 at least what here at the committee level we're  
11 suggesting would be an appropriate survey, then  
12 I can't support extending beyond the 20,000  
13 miles because there's too much uncertainty  
14 there. And so I was hoping and sensing that we  
15 were maybe getting somewhere on an appropriate  
16 frequency for that smaller-diameter pipe. But  
17 I think without that, it would be really hard  
18 to vote to include all Type C gathering.

19 MR. DANNER: Thank you. Sara?

20 MS. GOSMAN: Thanks very much.

21 And I'm really excited about the  
22 direction that we're going here in terms of a

1       compromise.     I just wanted to understand a  
2       little bit more about the annual leakage survey  
3       interval because I understood from the  
4       conversation before that in using Andy's  
5       language, you know, this is a duck, right?  
6       Which seems to me to indicate also that the  
7       duck should be part of the survey intervals  
8       that we've been applying elsewhere. So just to  
9       help me understand why we're there on the  
10      annual. I understand why we're there on five  
11      years, as to the rest.

12                   MR. DANNER: All right. Chad?

13                   MR. ZAMARIN: Thanks.

14                   Chad Zamarin, Williams. I'll try to  
15      address that. But annual was an attempt to  
16      mirror what the majority of transmission will  
17      be subject to from a survey requirement, and so  
18      recognizing that we're now extending to  
19      pipelines that have not. And there is a  
20      current requirement for Type C. So it is  
21      following, kind of drafting along with the  
22      existing requirements that were applied to this

1 subset of Type C. There are annual  
2 requirements that are in the current  
3 regulations. And so we're trying to cast the  
4 net wide, but we're trying to do it in a way  
5 that fits with kind of the current construct.

6 MR. DANNER: All right.

7 Is there further conversation?

8 All right. Erin. I'm getting very  
9 close to calling the question. So --

10 MS. MURPHY: I sensed that, Chair  
11 Danner.

12 Erin Murphy, EDF. I recognize that  
13 there is closeness to consensus, and I'm kind  
14 of undecided of, you know, supporting Member  
15 Turpin's recommendation to just not try to get  
16 so prescriptive in this recommendation if it's,  
17 you know, challenging to reach consensus on the  
18 frequency piece in particular or if it's, you  
19 know, worth kind of continuing to go back and  
20 forth. I think in particular, I'm just  
21 thinking about what Chad just said about the  
22 annual survey for the first subset of Type C.

1 The second subset of Type C, the five-year  
2 interval, is just a lengthy interval. And I  
3 won't keep saying the same thing, but I think  
4 three years would be a better starting place,  
5 from my perspective. And I wonder if at least  
6 the committee might recommend a three-to-five-  
7 year interval and leave that to PHMSA to  
8 evaluate.

9 MR. DANNER: Chad Zamarin?

10 MR. ZAMARIN: Thanks.

11 Chad Zamarin, Williams. I would  
12 like to propose that we vote on the five-year  
13 interval. I mean, I don't think we're going to  
14 get much support based on the input we were  
15 already getting on the concern with even doing  
16 this on a five-year interval. I mean, the  
17 conversation in the other room was about how we  
18 basically create a program that doesn't exist  
19 today to fly over every state within which we  
20 have gathering, do it in a way where we can  
21 cover every operator, including smaller  
22 operators. I mean, we're talking about a

1 massive new program for leak survey.

2 And so I don't think we're going to  
3 get there without having at least the five-year  
4 interval. Again, like, integrity management is  
5 seven-year assessment intervals, and we had a  
6 10-year phase-in. If you recall when we  
7 originally did, integrity management, it was  
8 10-year baseline, seven-year reassessment.  
9 Like, we're talking about five years for  
10 pipelines that have never been subject to  
11 regulations. Those pipelines had been under  
12 regulations for 50 years at the time. So I  
13 would like to propose that we take a vote on  
14 the language that's up there.

15 MR. DANNER: Would you consider the  
16 last bullet to be adopt at a minimum of five-  
17 year leak of survey interval?

18 MR. ZAMARIN: No. I mean --

19 MR. DANNER: Okay.

20 MR. ZAMARIN: -- again, no. I'm  
21 sorry.

22 MR. DANNER: Yeah. That's all

1 right. I mean, I share Erin's concerns, but I  
2 also realize that this is a compromise that we  
3 may have to make to move on. Andy?

4 MR. DRAKE: Erin, you're first. I  
5 missed something.

6 MS. MURPHY: No worries. Thanks.

7 Erin Murphy, EDF. You know, I think  
8 integrity management is a different type of  
9 program in some ways than leak survey. So I  
10 don't know that that being on a seven-year  
11 program feels compelling to me as a reason to  
12 lengthen this interval. As you stated right  
13 now, the longest survey frequency that  
14 operators are implementing on their  
15 transmission pipelines is once a year. And  
16 many segments of transmission pipelines are  
17 checked more frequently than that for leaks.

18 I'm also thinking back, and this is  
19 just one example, and I acknowledge that  
20 there's a lot more going on out there in terms  
21 of survey activity, but the Yu, et al. (2022)  
22 study, right, was a survey campaign that

1 involved aerial flyovers, covered 10,000 miles  
2 of gas gathering pipelines at least four times  
3 in a period from 2019 to 2021 using flyover  
4 surveys. So it's kind of tough to hear the  
5 idea that it's completely impossible to be  
6 surveying these lines any more frequently than  
7 every five years.

8 MR. DANNER: All right. Andy Drake?

9 MR. DRAKE: Andy Drake, Enbridge. I  
10 think when we were deliberating over this at  
11 break, I think Chad hit on it. The scale of  
12 what we're talking about doing is very  
13 significant, and the volume of flying is going  
14 to be very significant. This is a big change  
15 for an industry that hasn't had any of these  
16 obligations. I think it's very unconventional  
17 what we're talking about doing here.

18 We're going to be setting up a  
19 cottage industry to fly an entire state. And  
20 we're going to have to get all the members in  
21 that state to subscribe to the survey. It's  
22 not impossible. Nothing is impossible. It's

1 just, is it practicable? Is it doable? And I  
2 think five years is very reasonable for us to  
3 do this scale of work. Three, I don't even  
4 know if the industry can ramp up that fast to  
5 be very honest with you. I really don't, on  
6 the scale that we're talking about here.

7 I think five is appropriate to  
8 gather this data. And that's just where I am.  
9 I think the industry has moved significantly in  
10 this conversation to include the 70,000 miles  
11 that, you know, wasn't really considered how to  
12 be able to do that practicably. And I think  
13 this answers that practicability question.

14 MR. DANNER: Terry?

15 MR. TURPIN: Terry Turpin for FERC.  
16 Just to help me understand a bit because I'm  
17 lost in the conversation again, is the five-  
18 year meant to be the ramp-up to get the program  
19 going, or is it forever that it's five-year  
20 interval? Or it's five years, ramp up, and  
21 then something more frequent?

22 MR. DANNER: Chad?

1                   MR.     ZAMARIN:         Chad     Zamarin,  
2     Williams.  Yeah.  The proposal would be five  
3     years as a baseline, and then five-year  
4     reassessment intervals.  If you think about  
5     what we did in integrity management, we had 10  
6     years to do our first survey and then seven-  
7     year reassessment intervals.  What we're  
8     talking about and what we were talking about in  
9     the other room is basically, for a company like  
10    ours, a multi-state operator, we operate in 12  
11    different gathering basins.  You will be doing  
12    surveys of entire basins, and just like we do  
13    in integrity management, you'll be basically  
14    staging the work that you do over that five-  
15    year period.  So it's not like you're going to  
16    be, you know, sitting idle for five years, and  
17    then you do everything once.  It is a way for  
18    us to effectively phase the work across large,  
19    complex systems.

20                   And what we're talking about in the  
21    very practical kind of challenge of setting up  
22    is how do we do that in a way where we can

1 allow for every operator to not be flying  
2 across one another? And so we've got to set up  
3 a program where we're thinking about how would  
4 we practically do this? How do we set it up so  
5 that we're flying one airplane across the San  
6 Juan Basin and not 30 airplanes for 30  
7 operators? And so we're going to try to, you  
8 know, establish an industry, as Andy said, in a  
9 process. And you would be doing that kind of  
10 staggered intervals so that you could do that  
11 in a practical way.

12 MR. DANNER: All right. Sara?

13 MS. GOSMAN: I know you want to take  
14 a vote, but --

15 MR. DANNER: Well, I'm just hoping  
16 that the conversation is --

17 MS. GOSMAN: Yeah.

18 MR. DANNER: -- taking progress and  
19 not going around in circles.

20 MS. GOSMAN: Again, just a  
21 clarifying question, and I do want to recognize  
22 the movement here. You know, we have not

1       gotten to a full discussion, I think, of  
2       effective date and compliance timelines. I  
3       think it matters to me a lot whether that five  
4       years starts sooner or starts later. And I  
5       wonder if there's anything that you can share  
6       about that compliance deadline discussion that  
7       would help me to understand whether we're  
8       talking five years from the effective date of  
9       the rule or we're talking many more years after  
10      that based on an extended compliance.

11               MR. DANNER: Chad?

12               MR. ZAMARIN: Yeah.

13               Chad Zamarin, Williams. I'm not  
14      sure. I think we're going to talk about  
15      compliance dates, but whatever the effective  
16      date of the rule is, we would, I think,  
17      generally file precedent of five years from the  
18      effective date of the rule.

19               MR. DANNER: Sara?

20               MS. GOSMAN: Yeah. So just to  
21      confirm, you weren't looking at an additional,  
22      say, one or two years for this sector to come

1 into compliance with the ALDP requirements,  
2 which would include something like this?

3 MR. ZAMARIN: No.

4 MS. GOSMAN: Okay. Thank you.

5 MR. DANNER: Yeah. So it is the  
6 five-year leakage survey interval from the  
7 effective date of the rule. Okay. All right.

8 Erin?

9 MS. MURPHY: Yeah. If there's  
10 consensus on that point, it might be valuable  
11 to add that to the voting slide, if folks are  
12 comfortable with that.

13 MR. DANNER: I would have no problem  
14 with that, to amend the last bullet to say,  
15 leakage survey interval from the effective date  
16 of the rule.

17 All right. So you're saying it's  
18 covered in the preamble? All right. Okay.  
19 Erin?

20 MS. MURPHY: Thanks.

21 Erin Murphy, EDF. So for the other  
22 Type C gathering lines, if the committee votes

1 to adopt the certain frequency of leakage  
2 survey interval from the compliance date of the  
3 rule, what is the other bullet on setting  
4 appropriate implementation timelines?

5 Is that no longer needed?

6 MR. DANNER: Chad?

7 MR. ZAMARIN: Chad Zamarin,  
8 Williams. Yeah, I think that can be deleted.

9 MR. DANNER: Okay. So the first  
10 bullet under the first sub bullet. Okay. I  
11 think we have got a proposal in front of us.

12 Sara?

13 MS. MURPHY: Yeah. Just a friendly  
14 amendment. I think the beginning part, that  
15 opening preamble, should be Type A, B, and C  
16 gas gathering lines, rather than just Type C,  
17 given that that first bullet says that we're  
18 going to extend these requirements to Type A,  
19 B, and C.

20 MR. DANNER: In the second where it  
21 says, Type C, that --

22 MS. MURPHY: No. I'm sorry. The

1 preamble language. The proposal --

2 MR. DANNER: Oh, the preamble.

3 MS. MURPHY: -- as published, right?

4 MR. DANNER: Oh, okay. Yes.

5 MS. MURPHY: Regarding applicability  
6 to Type A, B, and C gas gathering lines, I  
7 believe that --

8 MR. DANNER: Okay.

9 (Simultaneous speaking.)

10 MR. DANNER: I think that is a  
11 friendly amendment.

12 On the right side of the table here,  
13 are you okay with that? Just clarifying in the  
14 preamble that it's A, B, and C. Okay.

15 Sara, your card is up. More? Okay.  
16 I see no tent cards up. I'm going to take this  
17 opportunity to call a question. So --

18 MR. ZAMARIN: Motion.

19 MR. DANNER: Motion? Would somebody  
20 like to make a motion?

21 Chad Zamarin?

22 MR. ZAMARIN: Thanks. I'll make a

1 motion for the committee to vote on this slide  
2 that the proposed rule is published in the  
3 Federal Register and is supported by the  
4 Preliminary Regulatory Impact Analysis and  
5 Draft Environmental Assessment regarding  
6 applicability to Type A, B, and C gas gathering  
7 lines is technically feasible, reasonable,  
8 cost-effective, and practicable if the  
9 following recommendations are made: Extend  
10 GPAC-recommended LDAR requirements, including  
11 GPAC-recommended ALDP performance standards to  
12 all Type A, B, and C gathering pipelines; adopt  
13 an annual leakage survey interval for Type C  
14 gathering pipelines that are greater than or  
15 equal to 16 inches in outside diameter, or 8  
16 inches to 16 inches in diameter if the segment  
17 contains a building intended for human  
18 occupancy or other identified site within the  
19 potential impact radius or class location unit;  
20 for other Type C gathering lines, adopt a five-  
21 year leakage survey interval, with a first  
22 survey occurring on the compliance date of the

1 rule.

2 MR. DANNER: Thank you.

3 Is there a second? Terry Turpin

4 seconds.

5 Cameron, will you take the vote,  
6 please?

7 MR. SATTERTHWAITE: All right.

8 I'll say your name. If you agree  
9 with the motion, just say yes. If not, no.

10 Diane Burman?

11 MS. BURMAN: Yes.

12 MR. SATTERTHWAITE: Peter Chace?

13 MR. CHACE: Yes.

14 MR. SATTERTHWAITE: David Danner?

15 MR. DANNER: Yes.

16 MR. SATTERTHWAITE: Sara Longan?

17 MS. LONGAN: Yes.

18 MR. SATTERTHWAITE: Terry Turpin?

19 MR. TURPIN: Yes.

20 MR. SATTERTHWAITE: Brian Weisker?

21 MR. WEISKER: Yes.

22 MR. SATTERTHWAITE: Andy Drake?

1 MR. DRAKE: Yes.

2 MR. SATTERTHWAITE: Steve Squibb?

3 MR. SQUIBB: Yes.

4 MR. SATTERTHWAITE: Chad Zamarin?

5 MR. ZAMARIN: Yes.

6 MR. SATTERTHWAITE: Chad Gilbert?

7 MR. GILBERT: Yes.

8 MR. SATTERTHWAITE: Arvind

9 Ravikumar?

10 MR. RAVIKUMAR: Yes.

11 MR. SATTERTHWAITE: Erin Murphy?

12 MS. MURPHY: Yes.

13 MR. SATTERTHWAITE: Sara Gosman?

14 MS. GOSMAN: Yes.

15 MR. SATTERTHWAITE: Sam Ariaratnam?

16 MR. ARIARATNAM: Yes.

17 MR. SATTERTHWAITE: It is unanimous.

18 The motion carries.

19 MR. DANNER: Thank you, everyone.

20 But wait, there's more. We are going to take

21 our lunch break now. We will come back at

22 1:15, and this afternoon, we will complete the

1 gas gathering rule recommendations. So thanks,  
2 everyone. See you soon.

3 (Whereupon, the above-entitled  
4 matter went off the record at 12:02 p.m. and  
5 resumed at 1:20 p.m.)

6 MR. GALE: Members, public, John  
7 Gale with PHMSA again. After conversing with  
8 some of the members, and we believe the last  
9 remaining item we needed to discuss on gas  
10 gathering is the proposal related to NPMS. So  
11 PHMSA is requesting the committee's discussion  
12 on the scope of the NPMS requirements for Type  
13 A, Type B, and Type C regulated gas gathering.  
14 And that would be the last item to discuss on  
15 gathering lines.

16 MR. DANNER: Did you have slides  
17 that you want to present?

18 MR. GALE: We could try to dig up  
19 the slides from the last time.

20 So the proposal, and Sayler, correct  
21 me if I'm wrong here on anything, was basically  
22 to extend the NPMS requirements to Type A, Type

1 B, and Type C lines. There was a bit of a  
2 contention on this: Should we do it or not?  
3 There was some discussion in the comments  
4 regarding our legal authority on that. We  
5 thought we addressed that. I think Sayler  
6 addressed that also in some of his earlier  
7 slides. But it was just generally a proposal  
8 to extend the NPMS requirements to gathering  
9 lines, through the lines we regulate, which are  
10 the Type A, B, and C lines. And should we do  
11 that or not, or I guess, one option or some  
12 subset of those requirements?

13 MR. DANNER: Okay. Well, I will  
14 weigh in as just a member of the committee and  
15 not the chair, obviously. But my view is that  
16 the legal issues will shake out as they will.  
17 I believe that you have the authority to  
18 include A, B, and C in the NPMS. And my  
19 recommendation would be that you include all of  
20 them.

21 And with that, Chad?

22 MR. ZAMARIN: Thanks.

1                   Chad     Zamarin,     Williams.           I  
2     appreciate that. I do think this is an area  
3     where it is a clear exclusion in the law. And  
4     it states, you know, very clearly that the  
5     operative of a pipeline facility accept  
6     distribution and gathering lines. We don't  
7     have NPMS submissions for distribution lines,  
8     nor do we for gathering lines. And it's  
9     explicit in the law that the NPMS should not.

10                   I would also just say this is a leak  
11     detection. This is a methane mitigation rule.  
12     You know, the NPMS has been a tool that we've  
13     used for safety. If there's a safety  
14     regulation that would warrant the expansion of  
15     the NPMS, I think that's a worthy discussion to  
16     be had. But I don't know why we would go  
17     against kind of what's in the law and what  
18     benefit we gain by putting the burden on  
19     gathering operators to submit to the NPMS.  
20     Thank you.

21                   MR. DANNER: Thank you.

22                   Anyone else have comments they would

1 like to share?

2 Erin Murphy, then Andy Drake.

3 MS. MURPHY: Thanks.

4 Erin Murphy, Environmental Defense  
5 Fund. I think, you know, a starting place here  
6 is what is the NPMS, and why is it so  
7 important? This is a database of information  
8 on pipeline locations and characteristics  
9 around the country. In the proposed rule,  
10 PHMSA lists the stakeholders that use and  
11 access the NPMS, including journalists,  
12 operators, emergency responders, excavators,  
13 elected officials, public interest advocates  
14 and PHMSA, and state regulators.

15 And it's not just where the pipeline  
16 is, right? It's who is the contact  
17 information, the point of contact, the operator  
18 for a pipeline, the attributes of the  
19 pipelines, like the commodity and the diameter.  
20 This is really foundational information about  
21 our nation's pipeline infrastructure. And  
22 there's been, you know, so much discussion over

1 the course of this committee meeting, as well  
2 as in comments on this rulemaking and elsewhere  
3 about how much more information we need about  
4 gas gathering pipelines.

5 And I think a big part of that, as  
6 we were discussing, you know, Chad really  
7 helpfully put up some representative maps of  
8 some gathering infrastructure earlier today.  
9 We have been really interested in better  
10 understanding some of that sort of locational  
11 information as we think about the applicability  
12 of different standards. This is the starting  
13 place for collecting that information in one  
14 place.

15 You know, I hear the authority  
16 debate, and think it's probably preferable for  
17 the committee not to wade into a legal  
18 authority debate. There is a foundational, you  
19 know, statutory ability of PHMSA to collect  
20 information that it needs about gathering  
21 pipeline infrastructure. And so, you know, if  
22 it's easier for everyone to stand up an NPMS 2,

1 right, that's a different program, PHMSA could  
2 do that. But I think there's, you know, a lot  
3 of sort of logic and hopefully ease for  
4 everyone involved to have a single database  
5 with this type of information.

6 So I would absolutely support the  
7 inclusion of Type A, B, and C regulated gas  
8 gathering pipelines. I think, you know,  
9 environmental stakeholders and other public  
10 interest stakeholders filed comments also  
11 walking through the importance and the value of  
12 starting to include Type R gathering pipelines  
13 in the NPMS as well. Type R is unregulated  
14 gathering pipelines, except for right now, a  
15 requirement to file an annual report and a  
16 requirement to report on incidents on those  
17 lines. And that is partially, I think, a  
18 recognition by PHMSA and stakeholders of the  
19 need for more information about those Type R  
20 lines as well. So perhaps the rest of the  
21 committee may not want to wade into that today,  
22 but I do just want to emphasize, you know, from

1 our perspective, we need this information in  
2 one place to benefit, you know, all  
3 stakeholders for all gathering pipeline  
4 infrastructure. Thanks.

5 MR. DANNER: Thank you. Andy Drake?

6 MR. DRAKE: Andy Drake, Enbridge. I  
7 think that the question that comes to my mind  
8 is what is it we're trying to accomplish, you  
9 know, bottom line. You know, I remember,  
10 actually, when we developed the NPMS and all  
11 the requirements within it and all the  
12 programs. That is a pretty significant  
13 programmatic lift here. And, you know, I'm  
14 kind of hearkening back to the Prieto  
15 proposition that was looked up there earlier.

16 Some of these operators that the  
17 programmatic lift associated with doing the  
18 NPMS is quite burdensome. Is the need  
19 positional accuracy? Is the need awareness of  
20 for the public? Is the need the awareness of  
21 one call responders? What is it we're trying  
22 to solve here? Because there is a pretty heavy

1 lift associated with all the details of the  
2 NPMS.

3 Do we need all of that? We did in  
4 transmission. That's what this was all about.  
5 That's why the law focused on transmission. I  
6 don't know that we need all of those things,  
7 but the bureaucracy of the NPMS is heavy. And  
8 I just want to caution that. So when we just  
9 say, oh yeah, just do it, it's, like, that is a  
10 big lift, not just a little lift.

11 MR. DANNER: All right. Thank you  
12 very much. Arvind?

13 MR. RAVIKUMAR: Arvind Ravikumar,  
14 University of Texas. I'm going to talk about  
15 this issue from the perspective of what I've  
16 been seeing when we go out and do these  
17 measurements. You know, just this morning when  
18 we were discussing some of the gathering  
19 pipelines, the question was posed to me, you  
20 know, we know all of this great information on  
21 emissions from gathering pipelines. Can you  
22 tell me, did you see those emissions on Type A

1 or Type B or Type C pipelines? I can't because  
2 the data does not exist to be able to map the  
3 emissions that we see from an aircraft or other  
4 technologies to what the actual pipelines are  
5 and what category of pipeline it is and whose  
6 operator it is. I think that's such a big gap.  
7 You know, we've been talking the last time we  
8 met as well the need for data and reporting.

9 One of the biggest gaps for us is we  
10 go to do all these measurements. We get great  
11 information on emissions. We are not able to  
12 map it to a specific pipeline or a type of  
13 pipeline or work with the operators and tell  
14 them, hey, we are flying over this area. We  
15 saw an emission on your pipeline. Here's  
16 information for you. We can't do that because  
17 that mapping system does not exist. Now,  
18 whether that has to be part of the NPMS or a  
19 separate research that's funded by PHMSA, I  
20 don't know.

21 But this is a real need that the DOE  
22 just spent \$60 million funding methane

1 measurements. The EPA and DOE have put out a  
2 notice of proposed funding opportunity about \$1  
3 billion dollars through the MERP, Methane  
4 Emissions Reduction Program, that will have  
5 significantly more surveys of the pipeline  
6 system. Without such a mapping, it'll be very  
7 hard to make all of that data that's going to  
8 be collected be useful. Because ultimately,  
9 you don't just want to find the emissions; you  
10 want to work with the operators to make sure  
11 it's fixed. And without a mapping system, that  
12 gets really hard.

13 MR. DANNER: All right. Thank you  
14 very much. Sara Gosman?

15 MS. GOSMAN: Yeah. So, you know,  
16 I'm strongly supportive of having this  
17 geospatial data on all gathering lines in. And  
18 I think we've talked about the importance of  
19 data and learning more about the industry. It  
20 seems to me, this is a really critical part.  
21 PHMSA should be able to know where these  
22 pipelines are located. And I think that's

1 central to managing pipeline risks, but it's  
2 also central to communication with, as Erin  
3 mentioned, right, emergency responders, local  
4 public officials, and ultimately, to the public  
5 through the Public Viewer.

6 I think as we continue to work  
7 through pipeline policy here, we need to  
8 remember that people want to know about the  
9 pipelines that are in their communities. And  
10 this is one way that they can get that  
11 information. I think a lot about, you know,  
12 for example, we have policies that relate to  
13 chemical disclosure for hydraulic fracturing  
14 fluid in oil and gas production wells. And  
15 those are geospatial data about where those  
16 wells are. And that was really in response to  
17 public concern about the risks of hydraulic  
18 fracturing.

19 So it seems to me like this is  
20 central to pipelines and to pipeline risk and  
21 to public acceptance, really, of pipelines and  
22 in their communities. And then when I say

1 communities, I mean, broadly speaking here,  
2 right? Because I know that we're talking about  
3 rural areas, but that doesn't mean there aren't  
4 people who are there and who want to know  
5 something about the pipelines that are there.

6 MR. DANNER: All right.  
7 Commissioner Burman?

8 MS. BURMAN: Thanks.

9 So I just don't know enough if these  
10 requirements are helpful at this point. And so  
11 I guess I come back to the questions that Andy  
12 raised in terms of what are we trying to  
13 accomplish? Does this accomplish that? Are  
14 there any alternatives? And what is it now  
15 that we are looking at regulating gas gathering  
16 lines? What does this layer look like?

17 And so I don't have a problem  
18 exploring if these requirements could be  
19 helpful, but I don't know enough, and I'm not  
20 sure I'm hearing around this room that we all  
21 know enough to say, yep, these are the ones  
22 that should be attached. Maybe. Maybe aspects

1 of it, but I don't know that it's an apple-to-  
2 apple comparison.

3 MR. DANNER: Thank you. Chad, and  
4 then Peter.

5 MR. ZAMARIN: Thanks.

6 Chad Zamarin, Williams, and maybe to  
7 follow-up on Commissioner Burman, your comments  
8 there, I think that's what I'm struggling with  
9 is that I don't see the benefit and the utility  
10 of NPMS mapping. I mean, we just agreed that  
11 operators will have to survey their pipelines,  
12 and then they will be subject to addressing  
13 leaks that they detect. I mean, this is a leak  
14 detection and repair rule. It's not a public  
15 awareness rule. It's not, frankly, even a  
16 pipeline safety rule.

17 And so, you know, I think there's a  
18 reason why it was specifically excluded in  
19 legislation. This is very onerous. This is a  
20 very complex set of data that has to be  
21 compiled by operators. And now we're talking  
22 about minimum standards for all operators to

1 have to submit into the NPMS Mapping System.  
2 And the data is not going to be used. We're  
3 going to be using the survey requirements and  
4 the repair requirements to address leaks on our  
5 system. The NPMS is primarily used as a public  
6 awareness tool and a tool that is used for line  
7 locations. And intentionally, we focused on  
8 transmission lines because those are the lines  
9 that have the greatest potential impact to the  
10 public. Thanks.

11 MR. DANNER: Thank you. Peter?

12 MR. CHACE: Yeah. Pete Chace,  
13 NAPS. I wasn't around when NPMS was  
14 established, and I would like to hear what its  
15 purpose is supposed to be. It's not a wise  
16 remark. I just don't know. My sense was  
17 always that it was a tool for public officials,  
18 emergency responders to know what is in their  
19 area. Hopefully, no one uses it for line  
20 locating, but I would put the question out  
21 there: Is it actually useful? What is it used  
22 for?

1                   Another thing I'll note is Type A  
2                   and C gathering, to me shares a lot of the  
3                   characteristics of transmission lines, whereas  
4                   Type B is low-stress. And I note that  
5                   transmission and hazardous liquid lines are in  
6                   the system, whether it's distribution piping or  
7                   not. So I'm wondering, is that high-stress,  
8                   low-stress, a place to draw the line, or is it  
9                   something else? Again, I guess I'm just a  
10                  little ignorant on what NPMS is supposed to  
11                  achieve, and would the addition of gathering  
12                  help?

13                         MR. DANNER: All right. Thank you.  
14                  Alan?

15                         MR. MAYBERRY: You know, just to put  
16                  it very simply, NPMS is a public awareness  
17                  tool. It is to let people know, you know,  
18                  what's around them, where they live. And they  
19                  have access to their county level accuracy of  
20                  mapping. And then there are numerous folks  
21                  that have access to NPMS. I mean, there's the  
22                  Public Viewer, but then there's also access

1 provided to other government agencies, local  
2 responders, and the like. But it's purely  
3 about public awareness. You know, this is the  
4 next tranche, really, if you will, in posting  
5 pipelines to that national mapping, you know,  
6 GIS database.

7 So, you know, at this point, it's up  
8 to the committee, but perhaps consider voting  
9 on the language that's up there now. And we'll  
10 just take it under advisement. We've heard the  
11 comments. We've got comments on the docket,  
12 and we can take it from there.

13 MR. DANNER: All right.

14 Are there any other comments before  
15 we do that? Erin Murphy?

16 MS. MURPHY: Thanks.

17 Erin Murphy, EDF. I think just a  
18 final sort of point that I would like to flag  
19 is that this isn't something, hopefully, that  
20 would be completely, you know, a new process  
21 for operators, in that operators should know  
22 where their infrastructure is. And I think

1 we've seen with the reporting that has come  
2 into effect for gathering pipelines, including  
3 Type R, that there's a lack of clarity right  
4 now about some of this infrastructure. There  
5 is a discrepancy between, you know, what the  
6 agency had estimated the total mileage of  
7 gathering pipelines was and what was reported  
8 by operators when they had to do that first  
9 year of reporting. EDF filed some analysis in  
10 this docket comparing those numbers with some  
11 of the industry databases that we have obtained  
12 access to that also have, you know, some maps  
13 and mileage estimates for gathering lines.

14 And, you know, that's not to  
15 critique anyone, but I think to make the point  
16 that there is a need to improve this data. We  
17 also heard that during public comment from  
18 folks in the industry at the end of the last  
19 GPAC meeting about gathering line coverage,  
20 right? A lot of emphasis on, we need more  
21 information. This is how we collect more  
22 information is by standardizing the reporting

1 of this information for all gathering lines.

2 MR. DANNER: All right. Thank you.  
3 Diane Burman?

4 MS. BURMAN: Thank you. So I found  
5 this discussion helpful. Where I sit, having  
6 been a state regulator for 11 years, I don't  
7 think about standardizing without fully  
8 understanding what it is that we're trying to  
9 accomplish, what it is that the standard will  
10 do, and maybe if there are alternatives to  
11 that. I'm not opposed to exploring the need to  
12 look at NPMS or some other thing and how that  
13 may help. But I feel like there are unintended  
14 consequences.

15 I'm not hearing that we have clarity  
16 on how this directly will be helpful. And I am  
17 concerned that I think we need to change the  
18 language of the voting slide bullet because I  
19 don't think that we are fully understanding  
20 that we really want to say that PHMSA should  
21 extend the requirements to that when we're not  
22 necessarily sure how it's going to link

1 together. So I think it needs to be looked at  
2 a little more.

3 MR. DANNER: All right. Thank you  
4 very much.

5 Erin Murphy, and then Sara Gosman.

6 MS. MURPHY: Yeah. Erin Murphy,  
7 EDF. In an effort to be responsive to  
8 Commissioner Burman's point, I certainly am not  
9 the universe of folks who, you know, have  
10 thoughts about the use of this data, but can  
11 share, you know, my perspective and, I think,  
12 maybe echo some of Arvind's points earlier as  
13 well. The need for GIS, you know, mapping  
14 information on pipeline location, as well as  
15 diameter and type, I think, is something that  
16 we hear from communities that we work with who  
17 live near gathering pipelines and generally  
18 live near pipeline infrastructure who want to  
19 understand what is nearby this pipeline that  
20 crosses my yard, right? Like, what is it, and  
21 also want to understand what is the operator  
22 supposed to be doing on that infrastructure?

1                   And that can be really challenging  
2       where right now, I mean, we can, you know, make  
3       an attempt to apply the federal standards and  
4       approximate what type it is, but that doesn't  
5       really feel like the right approach when  
6       somewhere, there is a decisive determination  
7       of, you know, what type it is. So that sort  
8       of, you know, community-level desire for  
9       information, I think, is one place where having  
10      that all-in-one place in NPMS would be  
11      beneficial. And then just also want to  
12      mention, you know, the higher-level need for  
13      research and better improvement and  
14      quantification of the extent of methane  
15      emissions from pipeline infrastructure. Having  
16      this type of information strengthens those  
17      analyses and their accuracy.

18                   MR. DANNER: All right. Thank you.

19                   Sara Gosman?

20                   MS. GOSMAN: Yeah. And I think I  
21      made this point before, but I do think that  
22      this information is really critical for

1 communities. And then when I think about the  
2 perspective of the public members that I have  
3 talked to and the people who are worried about  
4 pipelines, right, they want to know more about  
5 pipeline systems. And I think that, in the  
6 end, right, should benefit pipeline operators  
7 in the sense that if you give people the  
8 information that they really want about  
9 pipeline systems and risk, they're more likely  
10 to accept pipelines in their communities. I've  
11 always thought that was the case, and I think  
12 it's true as well here.

13 I really don't like the language  
14 notwithstanding legal concerns. We're not a  
15 legal body to read statutes and determine  
16 agency authority. That's the job of agency  
17 attorneys. That's the job of judges  
18 ultimately. I think it's important to  
19 understand that the two sections that we are  
20 looking at here in the statute, one requires  
21 specific types of operators to submit  
22 geospatial information, but that doesn't do

1 anything in terms of prohibiting, right,  
2 information from other types of operators. And  
3 certainly, PHMSA has authority to require  
4 information under Section 60117(c). So I just  
5 don't think that this is the proper space to  
6 work out the legal determinations around agency  
7 authority.

8 MR. DANNER: All right. Thank you.

9 Chad, Sara Longan, and then Brian.

10 MR. ZAMARIN: Chad Zamarin,  
11 Williams. Thanks. You know, I disagree. I  
12 don't want to debate the legal arguments, and I  
13 don't think we solved those. I can read the  
14 language of the law, and it's pretty clear. I  
15 mean, it says that the operator of a pipeline  
16 facility, except distribution lines and  
17 gathering lines, shall submit geospatial data.  
18 I mean, there's a reason why it is explicitly  
19 excluded. Again, we've said this a lot.

20 This is an industry that has not  
21 been regulated and hasn't had the benefit of  
22 regulations. The primary source of records for

1 mapping of pipelines originally were hand-drawn  
2 drawings. And what we've had to do in the  
3 transmission industry over the last several  
4 decades is convert that hand-drawn drawing  
5 record into a geospatial data set. We've had  
6 to survey pipelines on the ground. We've had  
7 to use tools that go inside of our pipelines  
8 with mapping devices. I mean, it is not a  
9 trivial exercise to take what was a regulated  
10 industry, so at least we had really good  
11 records in the transmission industry, and then  
12 we went through the process of converting those  
13 records and going out and surveying pipelines.  
14 To meet an NPMS standard means you have to have  
15 that kind of accuracy. You have to go through  
16 that process. It is not trivial. That's why,  
17 frankly, it was excluded from the legislation  
18 when the NPMS was formed.

19 And so I appreciate increasing  
20 transparency, public awareness. But when we're  
21 talking about reducing methane emissions and  
22 we're talking about improving leak detection

1 and repair, I'm not hearing how that moves the  
2 needle. We just, you know, implemented a  
3 recommendation to extend leak surveys and  
4 repairs to gathering pipelines, but now forcing  
5 an industry that's never had to meet these  
6 standards into the bureaucracy and challenge of  
7 coming up to the curve very quickly, I just  
8 don't see how that makes any sense.

9 So, you know, I think it is  
10 important to recognize that if we were to vote  
11 on language like this might imply that we  
12 don't, as a committee, have issue with the  
13 legal issues. And I think, you know, at least,  
14 I do, when I read the law, I read it as it's  
15 written. And I'm not saying I'm a lawyer. I'm  
16 not saying I have the right answer, but I can  
17 interpret that. And it seems pretty explicit.  
18 So I think that is an important, relevant fact.

19 And then further, I don't understand  
20 how this advances leak detection, methane  
21 mitigation. I think if this is a public  
22 awareness issue, it should be taken on under a

1 different rulemaking. If it's a public safety  
2 issue, it should be taken on under a different  
3 rulemaking. But if there's research to be  
4 proposed and we do more targeted work, but to  
5 have a blanket requirement that all operators  
6 of gathering have to meet NPMS submittal  
7 requirements I think is unnecessary and  
8 burdensome.

9 MR. DANNER: Thank you. Sara  
10 Longan?

11 MS. LONGAN: Thank you.

12 Sara Longan, Army Corps of  
13 Engineers. I agree with Member Gosman and had  
14 concerns with the language, notwithstanding  
15 legal. Those same concerns are sort of  
16 affirmed by Chad's comments. And with the  
17 removal of that language, I'm now really  
18 concerned with what we're trying to accomplish  
19 here. And I want to hearken back to something  
20 that Alan said earlier. I think that this  
21 discourse and the debate is very constructive  
22 and helpful. And I think that it's very

1 exhaustive and fully captured on the record.

2 I believe I can offer language that  
3 helps get the members, my members, to a middle  
4 ground, but tell me if it doesn't land or if  
5 I'm mistaken. Notwithstanding legal concerns,  
6 I agree, we're not the advisory council to help  
7 PHMSA get there. Could PHMSA instead consider  
8 applicability of extending NPMS requirements,  
9 continue to Type A, B, and C? I'm enjoying the  
10 conversation, but I just don't know much  
11 farther we can or should get. Thank you.

12 MR. DANNER: All right. Thank you  
13 for that. We will come back to you.

14 I think that I want to give  
15 everybody whose tent cards are up an  
16 opportunity to talk. But I think that, you  
17 know, we probably don't need to spend the  
18 afternoon on this. I think that I'm seeing  
19 where people are landing on the big issue.

20 So let's go through this and start  
21 with you, Brian.

22 MR. WEISKER: I think I'll be just

1       brief. Brian Weisker, Duke Energy. Sorry.

2               Your language, Sara, would get me  
3       there. I mean, I question us at all with this  
4       whole topic, I mean, with something when I  
5       read, it's crystal clear that there's an  
6       exception here from Congress for gathering for  
7       distribution. I'm where Chad's at. This came  
8       about, I think in 2002, Pipeline Safety Act.  
9       So Congress has had several other opportunities  
10      with reauthorization of pipeline safety for at  
11      least four, maybe five. I'm not sure. And yet  
12      the reason for the exemption hasn't changed.  
13      So I'm not sure how we can recommend as a body  
14      that go against the language that's just  
15      crystal clear to me.

16             MR. DANNER: All right. Thank you.

17             Erin, then Arvind, then Diane.

18             MS. MURPHY: Erin Murphy, EDF. I  
19      said before, I don't think it's constructive  
20      for us to try to sort of debate the law. I  
21      feel like I should at least point out, though,  
22      that there is also statutory language that

1 authorizes PHMSA to collect information on  
2 gathering pipelines, including to inform  
3 whether and how to provide regulatory oversight  
4 of those facilities. So the agency has  
5 authority to collect information on this  
6 infrastructure. And I want to make some other  
7 points about sort of the existing standards for  
8 information collection that apply to pipeline  
9 operators, just to really underscore the  
10 feasibility of doing this.

11 The Texas Railroad Commission right  
12 now makes geospatial data that's reported by  
13 pipeline operators publicly available on a GIS  
14 viewing system. It includes the following  
15 information, and this includes information on  
16 gathering pipelines, county coordinates,  
17 commodity, type, distribution, transmission or  
18 gathering, operator name, operator number,  
19 operating permit number, in-service versus  
20 abandoned, interstate versus intrastate, system  
21 name, subsystem name, and diameter. Then  
22 earlier this year, the RRC implemented an

1 additional reporting requirement that is  
2 specific to gas gathering lines, which is  
3 pipeline material, SMYS, MAOP, and the pipeline  
4 type: A, B, C or R. That subset of data is not  
5 yet public because it just came into effect,  
6 but we hope to see that made public as well.  
7 So I just want to emphasize that this is  
8 happening in parts of the country, and it's  
9 entirely feasible for operators to do it.

10 MR. DANNER: Thank you. Arvind?

11 MR. RAVIKUMAR: Arvind Ravikumar,  
12 University of Texas. To Chad's earlier point  
13 about the difficulty of meeting the standards  
14 of the NPMS for gathering lines, I'm wondering  
15 openly if there's somewhere a middle ground  
16 here. Given that we just said, all gathering  
17 lines are subject to surveys once every five  
18 years, every technology, whether it's an aerial  
19 system or a satellite system, will give you the  
20 GPS coordinates of the pipelines they fly over,  
21 and of course, the leak indications as well.

22 Is it possible to use that

1 information that will already be collected as  
2 part of the leak detection survey to be  
3 included in some kind of a mapping system for  
4 gathering lines?

5 MR. DANNER: All right.

6 That's a direct question, if anybody  
7 wants to answer that direct question.  
8 Apparently, no one wants to answer that direct  
9 question.

10 So move on to the next card that is  
11 up. Diane?

12 MS. BURMAN: I won't answer your  
13 question, but I do think it gets to the heart  
14 of what is it that we're trying to do? What's  
15 the data that we need? What is the need that  
16 the data may satisfy, and are there  
17 alternatives to doing that? If what I'm  
18 hearing is that the communities are asking for  
19 this, it really needs to be understood on, what  
20 is that that might be outside of this process  
21 that can be helpful on communities and  
22 engagement that's ongoing, versus here from a

1 pipeline safety perspective?

2           However, as we move forward, I do  
3 think that this question is really important  
4 because we're seeming to lock into that it  
5 should extend the requirements when we're not  
6 necessarily sure, one, what that's going to do,  
7 if there are alternatives, and then the cost-  
8 effectiveness of that. So I just am looking at  
9 it from how can we kind of come to some middle  
10 ground that gives us an ability to know that  
11 we're trying to continue evolving? And I'm not  
12 sure by this that that's helpful.

13           MR. DANNER: Thank you. Andy, and  
14 then Sara.

15           MR. DRAKE: Andy Drake, Enbridge. I  
16 appreciate your comments, Commissioner Burman.  
17 I'm trying to understand what it is we're  
18 trying to accomplish. I appreciate the  
19 transparency to the public. Where's the pipes  
20 located? I think that's important. I think  
21 I'm kind of looking at this discussion, and I  
22 think Arvind kind of hit on it: Is there some

1 middle place here? When we say, well, you need  
2 to know where your pipes are. If you don't  
3 meet NPS, you don't know where your pipes are.  
4 That is not true. We've just decided that to  
5 answer that question, they need to meet this  
6 very rigorous hurdle rate. Is that what we  
7 have to do to solve this problem? And is it  
8 everywhere?

9 Well, what I'm hearing is the  
10 public. Well, we've been through an incredibly  
11 long discussion about most of the gathering  
12 pipelines aren't anywhere near people. So  
13 we're going to make all of those pipelines now  
14 meet the National Pipeline Mapping Standard,  
15 the highest standard of care on GPS location  
16 and accuracy, and all this rigor around all  
17 this peripheral information so we can say all?  
18 I'm not hearing the traction on that. You  
19 know, that is a huge burden. And I don't know  
20 what the value proposition of it is.

21 If there's some subset of pipes that  
22 we're worried that the public needs to know

1 where they are, okay. I get that. That sounds  
2 like transmission. Is there something that we  
3 need to do to create positional awareness for  
4 them? Yes. That's not NPMS. That's a  
5 different question. But I don't hear us  
6 breaking that down. I hear a very polar  
7 discussion. And I can't get traction on that,  
8 on the scale of what we're talking about trying  
9 to deploy here.

10 MR. DANNER: All right. Thank you.

11 Sara Gosman, and then Chad.

12 MS. GOSMAN: So I want to challenge  
13 a little bit this idea that public awareness is  
14 different and a separate topic from what we  
15 have been talking about here in terms of leak  
16 detection because I think that public awareness  
17 is the basis of really, almost everything we do  
18 in terms of pipeline safety regulation. That  
19 is, it is the way that we communicate with the  
20 public, and those who are charged with the  
21 safety of the public in terms of local  
22 government and emergency responders. And to

1 say that this rule shouldn't incorporate  
2 something that has the benefits of the public  
3 understanding more about pipeline systems, I  
4 don't think these two things are separate,  
5 right? They are very much linked.

6 And the fact that we're having this  
7 conversation now really is about the fact that  
8 gathering lines are now part of this regulatory  
9 process. And thus, I think, you know, we've  
10 just decided on that, right? And we've talked  
11 about frequency, but that also comes with it,  
12 you know, an understanding that we are at the  
13 point where we need more information about,  
14 say, location, right, geospatial data. So I  
15 think these things are very connected, and I  
16 think it's important to recognize that. I  
17 guess I would also say that when we think about  
18 what kinds of information people might need,  
19 who are charged with safety, right, I mean, I  
20 think a lot about PHMSA and what information it  
21 needs. I also think about people who are doing  
22 research and the information they need. These

1 are all part and parcel of this conversation.

2 I think the final thing I will say  
3 is that it seems to me that if you were to sort  
4 of just walk up to a member of the public and  
5 say, do you think that pipeline operators  
6 should give information about where their  
7 pipelines are to the folks who are regulating  
8 them, as well as to local emergency responders,  
9 right, and people who are living in those  
10 areas, I think they would be like, well, of  
11 course, right? That makes complete sense. And  
12 sometimes, I think it's important to just step  
13 back from the kind of cost-benefit that we're  
14 constantly doing in this committee and remind  
15 ourselves, again, of what people expect out of  
16 the system. People expect that operators are  
17 going to know where their lines are and that  
18 that information is being transmitted to those  
19 who regulate them.

20 MR. DANNER: Chad?

21 MR. ZAMARIN: Thanks.

22 Chad Zamarin, Williams. And to be

1 clear, we do provide that information to  
2 regulators. This is taking it to a whole other  
3 level. This is taking a transmission pipeline  
4 technology, the NPMS, who was intentional.  
5 Again, I know we don't want to talk legal, but  
6 it's important. This was not designed for  
7 gathering or distribution. This was designed  
8 for transmission, where we survey pipelines in  
9 airplanes. I mean, we don't do that on  
10 gathering systems.

11 And to be clear, we do public  
12 awareness for gathering. There is a  
13 requirement in the code that extends public  
14 awareness to gathering. It doesn't require the  
15 NPMS because that is a whole other level. And  
16 frankly, it's not the primary public awareness  
17 tool. The primary public awareness tool is us  
18 communicating with first responders, directly  
19 communicating with landowners. Line marking is  
20 required in the regulations. Emergency  
21 planning is required in the regulations.  
22 Damage prevention is required in the

1 regulations.

2 This is requiring a geospatial set  
3 of data to be collected on gathering lines that  
4 have never had to do that before to submit to  
5 the federal regulator. It is not the primary  
6 tool for public awareness for line marking.  
7 There's a big label on the NPMS website: Do not  
8 use this to locate a pipeline, for pipeline  
9 locating purposes. Like, that is not the  
10 primary purpose of the NPMS, but it is taking a  
11 very complex system and applying it to  
12 pipelines that have never been subject to those  
13 kinds of survey requirements.

14 And we may not get anywhere with  
15 this because there's a lot of good stuff we're  
16 talking about. And we're talking about taking  
17 bold action, like we did this morning. Here,  
18 we're talking about something that is not going  
19 to move the needle from a leak perspective,  
20 from a methane perspective, from a safety  
21 perspective, relative to the incredible burden  
22 that'll put on operators that have never had to

1 deal with this requirement before. Thank you.

2 MR. DANNER: Thank you.

3 Alan Mayberry?

4 MR. MAYBERRY: I just wanted to  
5 address the question of what we're trying to  
6 solve. I mean, really, the case for NPMS was  
7 made many years ago when we set up the NPMS.  
8 So the question here today is: Do we extend  
9 that to gathering lines? It's purely about  
10 that. It's not more complicated than that.  
11 And it's for transparency reasons, the variety  
12 of reasons that were mentioned in the preamble  
13 and we've talked about here today. We've seen  
14 issues, incidents on gathering lines that the  
15 public didn't know anything was nearby, not  
16 that the NPMS would be their primary tool for  
17 learning that. There are other tools. There's  
18 no one tool that's used for public awareness.

19 But this is one data point, you  
20 know, that improves transparency related to  
21 where these types of pipelines are. But that  
22 was the intent is extending it to gathering

1 lines. We've done transmission. We have a  
2 record of that, well-established records. So  
3 really, the question here today is: Do we  
4 extend it for the reasons that we already know  
5 or the reasons we do it for transmission lines?

6 MR. DANNER: Thank you. Erin  
7 Murphy?

8 MS. MURPHY: Thanks.

9 Erin Murphy, EDF. I guess one thing  
10 I'm thinking about as I was listening to Chad's  
11 comments just now is it sounds like you're  
12 viewing the NPMS in particular as a very high  
13 bar to information collection. And I'm  
14 thinking about the list of attributes I read  
15 off as part of the Texas Railroad Commission  
16 reporting requirements that are applicable to  
17 gathering pipelines. And I don't know if you  
18 have a response to that.

19 But I'm wondering if you can speak  
20 to, like, the distinction between those, and  
21 what is the particularly sort of high burden  
22 with NPMS that is so burdensome?

1                   MR. ZAMARIN: Sure. Chad Zamarin,  
2 Williams. Thanks.

3                   And I think this goes back to one of  
4 the issues that we saw earlier this morning.  
5 There are a lot of small operators. There's a  
6 lot of variability across the gathering  
7 industry. And I think we know that you can  
8 manage safety. You can manage public  
9 awareness. You can educate and interact with  
10 the regulator with the traditional records that  
11 exist on gathering systems.

12                  And so, I mean, this would require  
13 every operator. And this is what we did in the  
14 transmission industry. We adopted geospatial  
15 information systems. You know, GIS is  
16 something that we implemented. And this law  
17 basically required that on all transmission  
18 operators. And it took a lot of time, effort,  
19 and resources to build those database systems.

20                  And so are there some operators that  
21 already do that in the gathering space? Sure.  
22 Are larger operators likely equipped and

1 already have those systems for transmission  
2 systems? Sure. But now you're talking about  
3 extending a technology to operators that have  
4 never had to do anything other than manage  
5 their systems on paper records. I mean, we  
6 still have a lot of paper records. You know,  
7 high-tech for some operators is still Microsoft  
8 Excel.

9           You know, you're talking about now  
10 adopting a minimum standard that will require  
11 every operator to understand GIS, and not every  
12 operator has a GIS department. Not every  
13 operator has the software capabilities that  
14 would be required to generate the information  
15 that needs to be submitted.

16           And again, I'm just trying to  
17 understand for what benefit. Like, if we're  
18 worried about public awareness, we have a  
19 public awareness requirement in the code that  
20 applies to gathering. Let's focus on that. We  
21 have a damage prevention requirement in the  
22 code that focuses on gathering. We have an

1 emergency planning requirement in the code that  
2 focus on gathering. Like, if those are the  
3 reasons, we've already got regulations we've  
4 extended. And I appreciate that there may be  
5 benefits for leak detection, but I'm not seeing  
6 it.

7 To me, what we did this morning,  
8 that's a real benefit. Let's go out and let's  
9 survey lines. Let's repair leaks. But just to  
10 create the requirements to have to stand up  
11 these technologies across operators that may  
12 not have that capability, I'm struggling with  
13 seeing the benefit.

14 MR. DANNER: Thank you. Erin?

15 MS. MURPHY: Yeah. Thanks.

16 Erin Murphy, EDF. I mean, one thing  
17 I'm thinking through is that my understanding,  
18 and this is, you know, certainly anecdotal from  
19 conversations with folks who have undertaken  
20 efforts to map pipeline infrastructure and  
21 really understand the application of the  
22 different categories of regulation that PHMSA

1 has established for gathering pipelines, that  
2 the authoritative way to make that  
3 determination involves GIS mapping and the  
4 application of tools that are, you know, taking  
5 the PHMSA standards and deploying them, using  
6 GIS. So if operators are making the  
7 determination of what regulated category their  
8 gathering pipeline mileage is without using,  
9 you know, mapping tools, I think that maybe  
10 raises a bit of a concern. My impression is  
11 that operators have to figure that information  
12 out and should also be providing it to NPMS.

13 MR. DANNER: All right. Thank you.

14 And I put my own card up. I just  
15 want to weigh in here. In Washington, 25 years  
16 ago this summer will be the 25th anniversary of  
17 the Bellingham explosion, which is kind of  
18 seared into the makeup of Washington state. It  
19 was an explosion that killed two boys. And  
20 since then, we developed a mapping tool that is  
21 available to first responders. It's available  
22 to journalists. It's available to the public.

1                   What we found is there is a lot of  
2 interest by local governments, county  
3 governments, even in rural areas. They want to  
4 know where pipelines are located. They want to  
5 have basically situational awareness about  
6 where it is they live and what is in their  
7 communities. And when we don't provide that,  
8 there is a trust issue with their government  
9 saying, you're hiding information from us that  
10 we think is necessary for us to manage our own  
11 lives and our own safety. And so I think it's  
12 very important to have this kind of  
13 transparency. And that's why I believe that  
14 all of these gas gathering lines should be part  
15 of the NPMS system.

16                   So Chad Zamarin?

17                   MR. ZAMARIN: Thanks.

18                   Chad Zamarin, Williams. I'll try to  
19 just maybe follow-up to Erin, your comment. We  
20 don't need GIS as the primary tool for managing  
21 pipelines. I mean, for over a century we've  
22 been managing pipelines with other tools beyond

1 just GIS geospatial systems.

2 And I appreciate, Chairman, your  
3 comments. I mean, the challenge is, again, I  
4 kind of feel like a broken record on this, but  
5 we're talking about an industry. We're talking  
6 about, you know, in the liquids transmission  
7 industry, which that unfortunate incident was  
8 on a liquid transmission pipeline. In the gas  
9 transmission industry, we've been regulated for  
10 over 50 years, and we've had to have maps. You  
11 know, even before there was GIS, we had to have  
12 detailed maps. We had to go out and survey our  
13 pipelines because we had to do classification  
14 surveys, and we had to have accuracy of  
15 structures nearby.

16 I mean, you can absolutely manage a  
17 pipeline network without NPMS data. And NPMS  
18 data is not something that any operator uses on  
19 a day-to-day basis to manage our pipeline  
20 system. That's a submittal that we have to  
21 provide. And I think it's something that we  
22 were able to do, frankly, because we were

1 already developing systems at the level of  
2 maturity that that industry was at the time  
3 NPMS was created.

4 We're not at that level of maturity  
5 in the gathering space. That's why there's all  
6 this angst about, let's make sure that things  
7 we're extending to gathering are really worth  
8 the bang for the buck. Because we're going to  
9 spend the next 10, 20 years now driving  
10 operators to take all those paper records out  
11 to hire, you know, consultants and contractors,  
12 turn it into geospatial data for the purpose of  
13 a federal report instead of focusing on, you  
14 know, the things that we talked about this  
15 morning that would have more impact, I think,  
16 on reducing emissions and improving safety.  
17 Thanks.

18 MR. DANNER: All right. Thank you.

19 Diane, then Steve, then Sara.

20 MS. BURMAN: So I'm still grappling  
21 with what the rationale is on the NPMS being  
22 applied here in a leak rulemaking, versus a

1 separate public awareness rulemaking, which I  
2 think is more appropriate, if that's sort of  
3 the lens and the only lens. I think that  
4 community engagement and how to layer it in,  
5 with this type of rulemaking is fine, but I'm  
6 not hearing it as this will help in the safety  
7 aspect. And I'm just trying to understand. I  
8 don't necessarily have a problem with exploring  
9 what may or may not be helpful and how that can  
10 be incorporated.

11 But I am really concerned that we  
12 are layering a lot of mandates on without fully  
13 exploring. And I don't see it in the record  
14 without fully exploring, what are we trying to  
15 accomplish, what exactly this will do and are  
16 there alternatives and how can we first look at  
17 what it is that we need and how to stand it up  
18 in a way that doesn't wind up sort of crumbling  
19 because there are a huge amount of cost  
20 implications on that that may not actually be  
21 effective in helping address the very issue  
22 that the rulemaking is about. And so I'm just

1 struggling with that.

2 MR. DANNER: All right.

3 MS. BURMAN: And just from a  
4 transparency perspective, you can also, you  
5 know, look at other things alternatively, like  
6 the one-call system to get at those issues. So  
7 I just am trying to grapple with again, a real  
8 rationale for why this fits here in this  
9 rulemaking, versus the separate rulemaking on  
10 public awareness.

11 MR. DANNER: All right. Thank you.

12 Steve Squibb, and then Sara Gosman.

13 MR. SQUIBB: Steve Squibb, City  
14 Utilities of Springfield, Missouri. I have  
15 similar comments as Diane, as she was talking.  
16 To me, it goes back to the congressional  
17 mandates. And when NPMS came about, it was  
18 excluded specifically, gathering and  
19 distribution. There's been previous rulemaking  
20 for gathering that didn't consider NPMS during  
21 those rule makings. And this current  
22 rulemaking, I don't see it specifically in the

1 mandates. So to me it sets a bad precedent for  
2 rulemaking going forward. And this just does  
3 not seem to be the appropriate rulemaking to  
4 extend this requirement to gathering.

5 MR. DANNER: All right. Thank you.

6 Sara Gosman?

7 MS. GOSMAN: Yeah. Two things. I  
8 mean, again, from my perspective, transparency,  
9 trust, these are essential to every single  
10 decision that we make in terms of pipeline  
11 safety issues and environmental issues. So to  
12 me, it seems very linked. But, I mean, even if  
13 we were to look at questions around if the  
14 public knows where pipelines are and they, you  
15 know, discover a leak, right, I mean, they are  
16 in some ways our one sort of version of our  
17 leak detection system. And so in that way it's  
18 very directed in terms of leaks.

19 One thought I had as we had this  
20 discussion is that some of the concerns about  
21 standing up programs and making it practical  
22 for the industry really came down to frequency

1 issues around how often, right, the industry  
2 had to do something. And I'm wondering if  
3 there's some sort of equivalent here in terms  
4 of NPMS. For example, is a longer timeline to  
5 get the geospatial data in something that could  
6 help alleviate some of these concerns about  
7 whether it's practical but still allow for the  
8 main point here, which I think is it's  
9 important to bring these gathering pipelines  
10 into NPMS.

11 And yeah. As a law professor, I  
12 feel the need to say again that I really don't  
13 think it's our job to be interpreting statutes  
14 in the way that a lot of folks are doing around  
15 the room. I mean, we can all read statutes,  
16 but I think this is something that we should  
17 leave to lawyers and judges. And ultimately,  
18 the judges are going to have to make the  
19 decision about agency authority. We can read  
20 statutes, but there are lots of legal tools  
21 around interpretation of statutes. You're  
22 using plain text as your interpretive tool, but

1       there's also context. There's looking at other  
2       provisions in the statute, legislative history.  
3       I mean, all of these things need to be taken  
4       into account when we're thinking about  
5       interpreting statutes. And I don't think that  
6       that's what we should be doing here.

7                 MR. DANNER: Thank you. Steve, and  
8       then Erin.

9                 Oh, okay. Erin?

10                MS.     MURPHY:           Erin     Murphy,  
11       Environmental Defense Fund. I want to just  
12       make a final point to make sure that I've been  
13       very clear that the benefits of including  
14       gathering pipelines in the NPMS and having that  
15       information accessible to the public and  
16       stakeholders are directly connected to pipeline  
17       safety and PHMSA's actions to set minimum  
18       pipeline safety standards that protect safety  
19       and the environment. This is about improving  
20       public understanding of where leaks are  
21       happening, the extent of those leaks on  
22       pipeline infrastructure, and as we've been

1 talking about, really successfully conducting  
2 that research in a way that it's able to be  
3 tied to the infrastructure and how PHMSA  
4 regulates it requires access to this type of  
5 information.

6 I also want to just flag the point  
7 that operators are not the only entities who  
8 are identifying leaks on pipeline  
9 infrastructure. We see more often, probably in  
10 the distribution setting, you know, sometimes  
11 local organizations that are interested and  
12 concerned about the safety and environmental  
13 impact on their communities and are going out  
14 and doing community leak surveys and then  
15 sharing that information publicly and with the  
16 utility. We're also seeing right now, you  
17 know, a really important and exciting ramp-up  
18 of a nationwide effort to improve methane  
19 monitoring with extensive funding from the U.S.  
20 Environmental Protection Agency and the  
21 Department of Energy. We're going to be  
22 seeing, you know, monitoring consortiums going

1 out and conducting more methane monitoring  
2 campaigns. And those campaigns are going to  
3 yield data and find leaks, right?

4 And, you know, the Yu, et al. (2022)  
5 paper that I've been referencing because I read  
6 it recently so it's fresh in my mind as a  
7 helpful example, that team that did multiple  
8 survey campaigns, they used a database that  
9 they had to pay money to access to try to  
10 pinpoint the pipelines that the leaks were  
11 identified on and then contact the operators of  
12 those pipelines to let them know. And that was  
13 a multiple pass campaign and survey effort.  
14 And the study actually found that the emissions  
15 went down over time, and the researchers  
16 attributed that in part to their outreach  
17 efforts and the fact that perhaps, you know,  
18 those messages got through and the operators  
19 repaired those leaks. You shouldn't have to  
20 spend a lot of money to access an industry  
21 database to be able to figure out if a methane  
22 leak that you identified is on a certain

1 pipeline or not. And I think that's exactly  
2 the type of campaign that would, you know, be  
3 particularly beneficial for the pipeline  
4 industry if this type of information is  
5 available.

6 MR. DANNER: All right. Thank you.

7 From my chair here, I am observing  
8 that we are probably not going to have a  
9 unanimous vote or reach consensus on this  
10 issue. And so what I would like to do is go  
11 ahead and let's take the vote. I think for  
12 purposes of this vote, I would propose that we  
13 move the second two bullets and the  
14 parenthetical in the first bullet and just take  
15 a vote on whether PHMSA should extend the NPMS  
16 requirements to A, B, and C gathering lines.  
17 And we'll just, yes or no, and that will give  
18 PHMSA everything it needs to know.

19 Sara Longan?

20 MS. LONGAN: Thank you, Mr.  
21 Chairman.

22 And I just wanted to make sure that

1 my suggestion was clear, although it might not  
2 have been a good suggestion, and it may not  
3 work. Chairman, just based on the dialogue and  
4 what I'm hearing and where I'm right now, my  
5 position, is I don't think that that language  
6 works for me. Could they not consider the  
7 applicability of extending? They have to  
8 review for legal reasons anyways, that we've  
9 talked about at length.

10 Could we change the language to  
11 advise DOT to look into it, which is the  
12 probably only common denominator that I've  
13 heard in this dialogue? Thank you.

14 MR. DANNER: Yeah. And I think that  
15 that would be like a third option because I  
16 don't think that's going to move the needle for  
17 two sides that I've been hearing discussed so  
18 far. That's the only reason I didn't include  
19 that. I understand what you're saying. I will  
20 put that out there for a comment.

21 I think, Diane, you were up first,  
22 and then Erin?

1 MS. BURMAN: Yeah. I'm not sure why  
2 we're limiting the voting slide to kind of not  
3 incorporate what seems like some thoughtful  
4 discussion from the committee. So to me, yes,  
5 it may not be unanimous, but if someone votes  
6 no on this, it does not necessarily explain the  
7 rationale, and it also doesn't explain to me  
8 the rationale on why we would extend it. So I  
9 feel like this is a flawed voting slide.

10 MR. DANNER: Well --

11 MS. BURMAN: And I wonder if we  
12 should incorporate some more explanation and  
13 caveats, especially if we're asking PHMSA to  
14 consider these requirements or alternatives in  
15 light of the intent and the rationale. And so  
16 for me, I'm just looking at it and saying, I  
17 don't think this as itself does it for opening  
18 it up. And I think we should actually have  
19 more flexibility for PHMSA to consider it from  
20 what we're actually saying as a committee.

21 MR. DANNER: Well, one way we could  
22 achieve that is by taking votes on several sets

1 of language, kind of like rank choice voting or  
2 something, which we don't have here. So, I  
3 mean, we could vote on this. We could vote on  
4 Sara's language. We could vote on Chad's  
5 language. Sorry, Chad. I don't know that you  
6 have language. I apologize.

7 But, I mean, at the end of the day,  
8 what we're really talking about is this: Should  
9 PHMSA be putting mapping requirements on A, B,  
10 and C? And so we can put caveats in there,  
11 but, you know, the more you put in, the more I  
12 will probably pull back myself. And I don't  
13 know if others would be in the same position.  
14 So there's no way to perfectly encapsulate  
15 everything in a vote. And I just wonder if the  
16 purest yes, no vote is the better way to go,  
17 and that's where I was leaning.

18 But I am open to suggestions, and  
19 I've heard yours, Diane. Erin?

20 MS. MURPHY: Erin Murphy, EDF. I  
21 think from my perspective, the language that's  
22 on the screen seems appropriate to vote on.

1 The reason I'm feeling that way is because it's  
2 felt like, in prior phases of the discussion,  
3 when there is a possible move towards consensus  
4 is when we start sort of trying to develop a  
5 more detailed recommendation. This language is  
6 what is in the proposed rule. So if there's  
7 not, you know, moves for consensus, then it  
8 makes sense to me to vote on whether or not the  
9 committee recommends what's in the proposed  
10 rule.

11 MR. DANNER: All right.

12 Chad, if you drop it on the floor  
13 again, I can't call on you ever again.

14 All right. Terry?

15 MR. TURPIN: Makes me want to throw  
16 mine off the table, too, there. So I'm going  
17 to offer something even different. It seems to  
18 me like the disconnect here is on one side, the  
19 presumption that this data already exists and  
20 therefore, why don't we get it into a system?  
21 On the other side, the perspective is, the data  
22 doesn't actually exist, and it's a lot of time

1 and effort and expense to stand it up. Why  
2 would we want to do that? And all the  
3 arguments around the table are centered on  
4 moving the ball forward. So instead of saying  
5 affirmatively, PHMSA must do what it said, and  
6 it's no, I mean, we're still just trying to  
7 make a recommendation to the body that's going  
8 to have to sort it out under the APA.

9 Why not capture both ends by saying,  
10 PHMSA should consider whether extending these  
11 requirements to these lines is appropriate  
12 through this rulemaking, or if there's some  
13 alternative method as I think Arvind had  
14 mentioned, if you're going to be doing the leak  
15 surveys, you're going to be capturing this  
16 stuff, is there some other way to get the data  
17 that overlays eliminating the cost problems and  
18 the time problems with stuff that's already  
19 happening? And so put it up as an alternative,  
20 I don't think anyone is saying, geospatial info  
21 wouldn't be good. I think the problem I'm  
22 hearing is, folks are assuming it exists.

1 Folks are saying, well in reality it doesn't  
2 exist. We would have to go out and create it.  
3 And that's where the rub is, so why not get  
4 around that rub?

5 MR. DANNER: I just remind you it's  
6 already in the proposed rules, and PHMSA has  
7 already done the cost-benefit analysis on it.  
8 But I would also say that what you're proposing  
9 is another option. So I don't believe that we  
10 are in a position where we're going to achieve  
11 consensus on the basic question. So again,  
12 just my thoughts.

13 And Andy?

14 MR. DRAKE: Andy Drake, Enbridge. I  
15 appreciate Commissioner Burman's position, that  
16 is, we're basically creating a binary slide  
17 here, yes, or no? And I think the real issue  
18 here may be guidance to PHMSA, which is created  
19 by the record we create, too.

20 Terry, your comments are now on the  
21 record, so you've kind of given PHMSA your  
22 guidance on a different solution, I think, in

1       that interest.

2                   The problem that I was having with  
3       the slide that was up there a few minutes ago  
4       was, one, the assumption that NPMS solves this  
5       problem.       And I think that is an  
6       extraordinarily burdensome solution to what  
7       need is out there. And two, that it's all of  
8       gathering. I think that is an incredibly  
9       burdensome obligation also for something that's  
10      not necessarily where the problem or the need  
11      is.       But we're making no effort to  
12      differentiate that. We're making no effort to  
13      try to figure out a fit for service solution.  
14      With tools that already exist, we just said no,  
15      it's got to be this. It's got to be the  
16      standard. It's got to be everything. And I'm  
17      having a real problem with that. It just does  
18      not make sense to me. So I just wanted to pass  
19      that on.

20                   MR. DANNER: Well, and thank you.

21                   I mean, I raised the issue as a  
22      regulator and a government official in my

1 state, you know, that there is an expectation  
2 of transparency. It goes to the trust that  
3 people have in their public officials. And so  
4 that's why I'm taking the position that I am.  
5 Now, you know, I'm wondering do we need to have  
6 a motion, or is there something we can simply  
7 put in the record that the committee was unable  
8 to achieve consensus on this point? I think it  
9 might be a question for Robert Ross, you know?

10 But I think that that is where we're  
11 going to end up is that we don't have consensus  
12 here. And how do we reflect that? Because,  
13 you know, I'm hearing a lot of points of view,  
14 but at the end of the day, it comes down to do  
15 we want the mapping system to include these  
16 gathering lines or not?

17 So, Robert, I'm going to turn to you  
18 first, and then Sara Longan and Diane.

19 MR. ROSS: Sure. Robert Ross from  
20 PHMSA. The most straightforward way to  
21 demonstrate that there's a lack of consensus by  
22 voting on something and the fact that you won't

1 have a majority vote on it would demonstrate a  
2 lack of consensus on it. But that said, if one  
3 of the alternatives is that folks want to put  
4 any number of different permutations on the  
5 above and vote on every one of them, then you  
6 would end up with the same result, you know?  
7 So it'll probably just be easier to vote on one  
8 set of wording and then give it an up or down.  
9 And then we will have to go back and look at  
10 the administrative record and sift through  
11 everyone's comments anyway.

12 MR. DANNER: Yeah. That was my  
13 thinking in trying to push the yes, no vote.

14 So with that, I think Diane and  
15 Sara. I can't remember if I said Diane, Sara  
16 or Sara, Diane.

17 Okay. Sara?

18 MS. LONGAN: Thank you.

19 I think we should just vote on this  
20 language, and I'm happy to make the motion. I  
21 think PHMSA did a very good job explaining why  
22 it thought geospatial data into NPMS was

1 important in the NPRM. So I want to make sure  
2 that we as a committee, or at least I,  
3 acknowledge that that explanation is in there.  
4 And it goes to a lot of the questions that  
5 we've been talking about in relation to public  
6 awareness. It also goes to actually improving  
7 pipeline operators, leak detection programs.  
8 So there are a lot of different reasons I think  
9 why this is a good idea.

10 And with that, I would defer to  
11 Chad, but then I'm happy to make the motion.

12 MR. DANNER: Okay.

13 I want to hear from Robert Ross.  
14 You had your card up for a second.

15 MR. ROSS: Yeah.

16 One additional mechanism that I  
17 failed to mention was that individuals, you  
18 know, like in this committee or in the public,  
19 can submit their comments after the meeting if  
20 they believe that the meeting vote didn't  
21 capture some nuance or consideration that they  
22 thought should have been reflected in the

1 voting slide.

2 MR. DANNER: Okay.

3 And again, I think I know what the  
4 result is going to be from this committee and  
5 just what is the most efficient way to get  
6 there. And I just think a lot of these  
7 permutations, while they raise interesting  
8 issues, they don't move us towards consensus,  
9 and I think we're still going to be forced with  
10 the yes, no vote at the end of the day.

11 But Chad?

12 MR. GILBERT: Yes.

13 Chad Gilbert from the United  
14 Association. I've just got a couple of points  
15 that I see that's really good about the mapping  
16 system in the rural areas. It allows planning  
17 commissions and developers to know where the  
18 gathering lines are, so that when these cities  
19 that are close to these rural cities, when  
20 they're close to these communities, it gives  
21 them some access, easy access to go to a place  
22 to where they can do their planning without

1     trying to contact maybe the smaller operators  
2     that are a little bit more difficult to get  
3     ahold of and get information from than, say, a  
4     larger operator. So those are a couple of  
5     points.

6                     And I do have one question. Are we  
7     talking about some of these gathering lines are  
8     carrying the same volume and pressure as a  
9     transmission line? So is that something that  
10    maybe someone could help me with here?

11                    MR. DANNER: Chad, do you want to  
12    answer that direct question?

13                    MR. ZAMARIN: Yeah.

14                    It includes those, and my sense is  
15    we wouldn't get to consensus, but one of the  
16    problems is it goes much further beyond that,  
17    and it includes all Type C gathering. And so  
18    yes, it does include the small subset of those  
19    lines that do look more like transmission that  
20    are larger. But the problem is this is  
21    extending to all 500-plus operators, and even  
22    the small diameter, lower pressure lines.

1                   MR. GILBERT:     So Commissioner, a  
2 direct response?

3                   MR. DANNER:   You may, yeah.

4                   MR. GILBERT:   So you can see the  
5 public's concern about these lines being  
6 mapped, these gathering lines that are carrying  
7 that amount of pressure.

8                   MR. DANNER:   All right. Thank you.  
9 Peter, did you have your card up?

10                  MR. CHACE:   Pete Chace, NAPSR. I  
11 keep going back and forth about raising the  
12 card. I think Chad did bring up a good point.  
13 I think where you're losing me on this is the  
14 inclusion of the Type B lines. I think with  
15 Type B and particularly Type R lines, we have  
16 to realize that not all of these operators are  
17 like my colleagues here seated to my right. We  
18 have thousands of miles of lines in Ohio that  
19 are operating maybe 15 to 40 pounds. If you  
20 ask them for geospatial information, you're not  
21 going to get it. I don't see it as feasible  
22 for those low-stress lines. Type A and C,

1       sure, I personally think it is.

2                   MR. DANNER: All right. Thank you.

3       Chad?

4                   MR. ZAMARIN: Thanks.

5                   Chad Zamarin, Williams. Just to  
6       follow-up on that. I do want to point out,  
7       though, this is just the NPMS requirement.  
8       PHMSA did pass several regulations specifically  
9       targeted towards those larger diameter  
10      gathering lines, and so those are covered. And  
11      I mentioned just a couple of those. But we  
12      extended MAOP confirmation requirements, which  
13      would lead to pressure testing and verification  
14      of those types of larger diameter, higher  
15      pressure pipelines, leakage survey and repairs.  
16      Corrosion control requirements were extended to  
17      those, line marking. So line marking  
18      requirements are the same for Type C gathering.  
19      Larger diameters, they are for transmission.

20                   We have to extend the Public  
21      Awareness Program to those pipelines. The  
22      subset we talked about earlier, the 20,000

1 miles that look like a duck, quack like a duck,  
2 like, we have a public awareness requirement in  
3 the regulation that covers those pipelines. We  
4 have an emergency planning requirement in the  
5 regulation that covers those pipelines.

6 So I think that PHMSA actually did a  
7 good job of being surgical, of not taking a  
8 blunt instrument and saying, let's extend  
9 everything, you know, including NPMS to all  
10 gathering pipelines. They were surgically kind  
11 of inserted, and we voted on those as a GPAC.

12 It was before, you know, Chad, you  
13 joined the committee. But those were, for the  
14 most part, I think unanimous votes of how we  
15 extended requirements to those gathering lines  
16 that looked and felt more like transmission  
17 lines. Thank you.

18 MR. DANNER: Chad, did you have your  
19 card up?

20 MR. GILBERT: Yeah.

21 I can just see the advantage to the  
22 public being able to know where these lines are

1 located, just like I said, a planning  
2 commission of a small rural town that's looking  
3 to expand their town in a certain direction.  
4 And that would help industry, too, by not  
5 having more regulations in a certain area  
6 because of a class change. So I can just see  
7 where the public would have an advantage. And  
8 this would really help them in just knowing  
9 where these lines are located and an easy way  
10 of going about finding out that information  
11 through the mapping system. Thank you.

12 MR. DANNER: All right. Thank you.  
13 Erin Murphy?

14 MS. MURPHY: Erin Murphy, EDF. I  
15 appreciated Pete's point earlier, and I think  
16 Chad mentioned this as well, just folks who  
17 have historically had their records, you know,  
18 on paper or in, you know, more sort of legacy  
19 formats. And my thinking there is, the fact  
20 that that is the case doesn't mean we shouldn't  
21 be striving for sort of improvement across the  
22 board in the way this information is managed

1 and tracked and moving towards, you know, fully  
2 digitizing, if that's the right word, GIS-ing  
3 right, this data about pipeline locations.

4 I do think for me, Type B because  
5 they're in such populous areas, it feels  
6 important to keep them included in reporting to  
7 NPMS as PHMSA has proposed. And I can't tell  
8 if it's not worth going this direction or not,  
9 but it feels like that's the type of  
10 consideration where, you know, thinking about a  
11 recommendation to PHMSA on the timeline for  
12 when this information would be needed, you  
13 know, might be distinct for different classes  
14 of operators.

15 MR. DANNER: All right. Thank you.

16 So at this point, this is what I  
17 would like to do. I would like to entertain a  
18 motion on the slide that's up there. But I  
19 want to give every member, if you have a  
20 permutation or a different motion that you  
21 would like to make, we'll take the vote on this  
22 one, and then we will consider any other

1 motions or all other motions that come before  
2 us if there's permutations that you would like  
3 the committee to consider. So at first, I  
4 would entertain a motion on this slide, and  
5 then we can move to any others that the  
6 committee might want to offer.

7 Okay. Diane, are you planning to  
8 make a motion?

9 MS. BURMAN: Yeah.

10 Before we vote, I just want to say  
11 one thing because I just want people to  
12 understand where I'm coming from, is if we are  
13 voting on what I see as a very binary, yes or  
14 no vote, I don't believe for myself that any  
15 other vote after that and having sort of a  
16 running list of different options is actually  
17 helpful. Because for me, it comes to is that a  
18 sufficient vote? Do we have the record? And I  
19 don't think then trying to layer on after that  
20 different options is actually helpful to the  
21 record. I think that the record is not even  
22 sufficient to get us to this binary vote.

1       However, if that's what we're doing, a yes or  
2       no vote, and then I don't see any other need to  
3       have different options.

4                   MR. DANNER:     Yeah.     My thinking  
5       there was if people are going to vote yes or  
6       no, and some people are going to say, I voted  
7       no because -- and another motion would help  
8       them if they didn't want to provide separate  
9       comments to be included in the record, that's  
10      the only reason I offered. I just want to say  
11      that I'm not advocating further motions. I'm  
12      not not advocating for motions. I'm just  
13      saying I would consider and allow any further  
14      motion to be voted on by the committee.

15                   So with that, Sara Gosman?

16                   MS. GOSMAN:    I would like to go  
17      ahead and make the motion then. So the  
18      proposed rule is published in the Federal  
19      Register and is supported by the Preliminary  
20      Regulatory Impact Analysis and Draft  
21      Environmental Assessment with regards to NPMS  
22      participation for Type A, Type B, and Type C

1 gathering lines is technically feasible,  
2 reasonable, cost-effective, and practicable.

3 MR. DANNER: All right.

4 Is there a second? Erin Murphy  
5 seconds.

6 Cameron, would you take the vote,  
7 please?

8 MR. SATTERTHWAITE: All right.

9 I'll say your name, and if you  
10 agree, say yes. If not, say no.

11 Diane Burman?

12 MS. BURMAN: No.

13 MR. SATTERTHWAITE: Peter Chace?

14 MR. CHACE: No.

15 MR. SATTERTHWAITE: David Danner?

16 MR. DANNER: Yes.

17 MR. SATTERTHWAITE: Sara Longan?

18 MS. LONGAN: Yes.

19 MR. SATTERTHWAITE: Terry Turpin?

20 MR. TURPIN: Yes.

21 MR. SATTERTHWAITE: Brian Weisker?

22 MR. WEISKER: No.

1 MR. SATTERTHWAITE: Andy Drake?

2 MR. DRAKE: No.

3 MR. SATTERTHWAITE: Steve Squibb?

4 MR. SQUIBB: No.

5 MR. SATTERTHWAITE: Chad Zamarin?

6 MR. ZAMARIN: No.

7 MR. SATTERTHWAITE: Chad Gilbert?

8 MR. GILBERT: Yes.

9 MR. SATTERTHWAITE: Arvind

10 Ravikumar?

11 MR. RAVIKUMAR: Yes.

12 MR. SATTERTHWAITE: Erin Murphy?

13 MS. MURPHY: Yes.

14 MR. SATTERTHWAITE: Sara Gosman?

15 MS. GOSMAN: Yes.

16 MR. SATTERTHWAITE: Sam Ariaratnam?

17 MR. ARIARATNAM: No.

18 MR. SATTERTHWAITE: It's a tie vote,  
19 seven to seven.

20 MR. DANNER: A personal failure on  
21 my part. Well, thank you, everybody, and this  
22 was kind of what I observed. Now, is there

1 anyone on the committee who wishes to make a  
2 subsequent motion on these issues? All right.  
3 All right. So we are going to take a 10 to 15-  
4 minute break, and then we will come back and  
5 tackle the next issue. Thank you.

6 (Whereupon, the above-entitled  
7 matter went off the record at 2:37 p.m. and  
8 resumed at 3:04 p.m.)

9 MR. DANNER: All right, everyone.  
10 This afternoon we were planning on having a  
11 discussion about the reporting requirements.  
12 We are aware that there are several people who  
13 will be flying in tomorrow, hoping to make  
14 public comment on that. And so we made a  
15 decision that we are going to skip over that  
16 item and come back to it tomorrow. And this  
17 afternoon, we are going to take up liquefied  
18 natural gas and hydrogen.

19 So with that, I'm going to turn it  
20 back to John, who will tee up PHMSA discussion.

21 MR. GALE: And like a true golfer,  
22 I'm just going to hand it off to Mr. Clayton

1 Bodell.

2 Clayton?

3 MR. BODELL: All right. Good  
4 afternoon. I'm Clayton Bodell with PHMSA's  
5 Standards and Rulemaking. So yeah, we're going  
6 to jump into our discussion for LNG and  
7 hydrogen. So let's go ahead and move to the  
8 next slide. So regarding LNG, we'll cover the  
9 current requirements. And those cover,  
10 generally, leakage surveys, O&M requirements,  
11 and blowdown mitigation.

12 So in Section 114 of the PIPES Act  
13 of 2020, it requires operators of gas pipeline  
14 facilities as defined in 49 U.S.C. 60101 to  
15 adopt procedures to minimize the releases of  
16 natural gas and address the replacement of  
17 pipelines known to leak. In 49 U.S.C. 60101,  
18 the term, gas pipeline facilities includes  
19 liquefied natural gas pipeline storage  
20 facilities. And Part 193 does not generally  
21 require operators of LNG facilities to mitigate  
22 operational emissions or perform periodic

1 leakage surveys.

2 Moving to our proposal, we proposed  
3 that LNG operators must minimize releases from  
4 operational non-emergency blowdowns. And the  
5 example methods parallel EPA methane challenge  
6 and industry commitments. We proposed to  
7 require quarterly leakage surveys for LNG  
8 facilities and repair leaks in accordance with  
9 the LNG operators' maintenance procedures. We  
10 proposed that the leakage survey equipment used  
11 for those leakage surveys must have a minimum  
12 sensitivity of 5 ppm, but for the ALDP  
13 performance standards proposed for Part 192 do  
14 not otherwise apply.

15 Regarding hydrogen and how the  
16 proposed rule applies to hydrogen, our current  
17 requirements are that Part 192 applies  
18 generally to all flammable, toxic, and  
19 corrosive gases transported by pipeline,  
20 including hydrogen gas and blended natural gas  
21 and hydrogen gas. Also, our current  
22 requirements have requirements, again, for

1 hydrogen and blends existing leak, survey  
2 patrol, and repair requirements. And those  
3 would apply to those hydrogen and blended  
4 pipelines.

5 In the proposal, we suggested that  
6 the proposed rule would apply to hydrogen  
7 pipelines. The NPRM regarding leak grading  
8 criteria: The NPRM does not propose to allow  
9 Grade 3 classification for hydrogen leaks,  
10 meaning they would all be either Grade 1 or  
11 Grade 2. Gas pipelines other than natural gas  
12 pipelines are eligible for alternative  
13 performance standards with notification  
14 regardless of location. And then PHMSA  
15 requested comment on the value of adopting  
16 hydrogen gas pipeline specific provisions in  
17 lieu of, or in addition to, the provisions  
18 proposed in the NPRM.

19 Regarding LNG and general  
20 applicability and looking to the comments that  
21 we received in response to the NPRM, industry  
22 trades expressed that Section 113 of the PIPES

1 Act does not apply to LNG facilities and that  
2 the rulemaking should have discussed how the  
3 proposed requirements fit into the separate  
4 statutory authority for LNG standards in 49  
5 U.S.C. 60103(d).

6 The Senator Cruz, et al. opposed the  
7 full scope of the proposed changes to LNG  
8 facility regulations, as contrary to  
9 congressional intent. And the Attorney General  
10 of New York, et al. supports LNG leakage survey  
11 requirement, as it fills a regulatory gap by  
12 requiring surveys of methane leaks for LNG  
13 facilities for the first time. PHMSA notes to  
14 these comments, LNG facilities are gas pipeline  
15 facilities for which PHMSA has broad authority  
16 under 49 U.S.C. 60102 and 60103. PHMSA will  
17 respond to comments in the final rule,  
18 addressing its statutory authority to introduce  
19 requirements for LNG facilities. PHMSA notes  
20 that the Section 114 mandate applies to gas  
21 pipeline facilities as defined in 49 U.S.C.  
22 60101, which include LNG facilities and

1 underground natural gas storage facilities.

2 Other comments regarding the  
3 minimizing blowdown and boil-off emissions:

4 This is specific to Part 193, Section 2523.

5 Industry trades suggest that PHMSA limit the  
6 applicability of Section 2523 to planned  
7 releases that exceed 1 MMcf, or 1 million cubic  
8 feet, without mitigation. An operator  
9 requested PHMSA clarify if operators had to  
10 demonstrate the required minimization methods  
11 are not achievable before a blowdown can take  
12 place.

13 Industry trades urged PHMSA to  
14 consider the alternative proposals for  
15 minimizing emissions during blowdowns and boil-  
16 off operations. An operator discussed venting  
17 events, stating that operators should have the  
18 flexibility to design their mitigation approach  
19 without restriction. Industry trades and an  
20 operator urged PHMSA to consider that LNG  
21 facilities need time to obtain new or modified  
22 air permits to route additional volume to

1 flares and that such actions can take years to  
2 complete.

3 Continued comments regarding  
4 minimizing blowdowns and boil-off emissions:  
5 Industry trades and an operator said that a  
6 smaller section of the piping segment is vague,  
7 and the term, control fitting is not defined in  
8 the rulemaking. And industry trades said that  
9 the text should be revised to require operators  
10 to reduce emissions instead of using the term,  
11 minimize.

12 PHMSA notes here: PHMSA will clarify  
13 the language for blowdown methods in the final  
14 rule to be more specific to LNG facilities.  
15 And while the proposed regulatory language uses  
16 the term, minimize consistent with the language  
17 in the PIPES Act, PHMSA's intent was that the  
18 use of any of the proposed methods would be  
19 sufficient to demonstrate compliance.

20 Continued notes regarding minimizing  
21 emissions: PHMSA notes that the committee  
22 discussed similar parallel gas transmission

1 requirements and made the following  
2 recommendations. And that is as you see on the  
3 screen. And then PHMSA requests committee  
4 discussion of the previous committee  
5 recommendations for gas transmission blowdowns  
6 as it could apply to LNG facilities.

7           Regarding leakage surveys at LNG  
8 facilities covered under Part 193, Section  
9 2624, we received comments as follows: NAPS  
10 expressed general support for the proposed  
11 leakage survey requirements. The Attorney  
12 General of New York, et al. expressed support  
13 for requiring quarterly methane leakage surveys  
14 for LNG facilities. An operator suggested  
15 monitoring unsafe to monitor and difficult to  
16 monitor components no more than twice per  
17 calendar year. And multiple industry trades  
18 and operators asked PHMSA to provide an LNG  
19 facilities exception similar to the proposed  
20 exception for transmission compressor stations  
21 regulated under EPA Quad 0 regs.

22           PHMSA notes: PHMSA requests

1 committee discussion on the proposed  
2 requirements for facilities that are subject to  
3 EPA emissions monitoring requirements.

4 A continued comment here regarding  
5 leakage surveys under Section 2624: Multiple  
6 industry trades and operators stated that it  
7 may be unnecessary to apply leakage survey  
8 requirements to mobile or temporary LNG  
9 facilities. Industry trades asked PHMSA to  
10 provide clarification on what the phrase,  
11 allowable environmental and operational  
12 parameters refers to with regards to the use of  
13 leakage survey equipment. PHMSA requests  
14 committee discussion on the proposed leakage  
15 survey requirements as they apply to mobile or  
16 temporary LNG facilities. And PHMSA intended  
17 for operators to comply with manufacturers'  
18 instructions for conditions when leak detection  
19 equipment may be used. PHMSA will clarify this  
20 in the final rule.

21 Regarding the repair schedule for  
22 leaks found during leakage surveys under

1 Section 2624, we received comments from the  
2 Pipeline Safety Trust in which they expressed  
3 support for the proposal, but suggested that  
4 PHMSA implement a specific repair schedule for  
5 leaks from LNG facilities. They suggested  
6 leaks at LNG facilities be repaired quarterly.  
7 That is within three months.

8 Multiple environment and public  
9 safety advocacy groups: A form letter campaign  
10 and an individual commenter suggested PHMSA  
11 consider requiring all LNG facilities to  
12 perform continuous monitoring, quarterly  
13 inspections, and leak repairs within one month  
14 of discovery. PHMSA requests committee  
15 discussion on repair timelines for leaks at LNG  
16 facilities.

17 Continued comments regarding leakage  
18 surveys, specifically here with regard to leak  
19 detection equipment: Industry trades  
20 recommended allowing OGI technology as an  
21 alternative technology consistent with EPA  
22 standards. An operator stated that the

1 proposed leak detection equipment standard of 5  
2 ppm within 5 feet is unnecessary and  
3 unreasonable, as most LNG plants are  
4 continuously manned and monitored. These  
5 facilities have systems capable of detecting  
6 leaks that present a hazard to the plant  
7 personnel and the public. There is no  
8 justification for requiring LNG operators to  
9 detect and remediate much smaller leaks at more  
10 frequent intervals. Industry trades and  
11 operators asked PHMSA to consider if leakage  
12 survey requirements need apply uniformly to all  
13 components and areas within an LNG plant.

14 And the Pipeline Safety Trust  
15 suggested the PHMSA develop a leak detection  
16 technology standard for LNG facilities that  
17 should include the same equipment sensitivity  
18 requirement as other Part 192 regulated  
19 facilities. PHMSA requests committee  
20 recommendations regarding leak detection  
21 equipment requirements for LNG leakage surveys.  
22 And PHMSA notes that the committee previously

1 recommended the following requirements for the  
2 capability of gas transmission leakage survey,  
3 and that is a 10 kilogram per hour flow rate  
4 standard for screening surveys; follow-up  
5 investigation of leak indications with handheld  
6 equipment at 5 ppm, or 5 ppm or 1 percent LEL  
7 to pinpoint the source of a leak; leakage  
8 survey with handheld or monitoring equipment,  
9 again, to the 5 ppm or ppm or above-ground  
10 appurtenances using OGI, or optical gas  
11 imaging, consistent with the EPA.

12           Regarding cost as it applies to LNG  
13 or to the provisions for LNG facilities:  
14 Industry trades stated that PHMSA did not  
15 identify any regulatory or non-regulatory  
16 options considered in conducting the risk  
17 assessment for the proposed safety standard.  
18 The commenter continued that the risk  
19 assessment in the PRIA is completely  
20 inadequate. Industry trades commented that the  
21 risk assessment should have separately  
22 considered standards for gas pipelines under

1 Section 113 and LNG facilities under 49 U.S.C.  
2 60103. Multiple operators and industry trades  
3 expressed concern that PHMSA did not calculate  
4 the full potential costs for implementing  
5 proposed Section 193.2624 for leakage surveys  
6 in its analysis. And PHMSA appreciates the  
7 comments, and we'll update the RIA as  
8 appropriate.

9 All right. Switching gears and  
10 talking now about general applicability of the  
11 proposal as it relates to hydrogen. We  
12 received a comment where an operator commented  
13 that reducing hydrogen gas emissions is not  
14 part of the PIPES Act mandate. Environmental  
15 advocacy groups and a hydrogen pipeline  
16 equipment vendor suggested PHMSA address the  
17 safety of hydrogen gas pipelines holistically  
18 in a hydrogen-specific rulemaking. An industry  
19 representative opposed hydrogen gas pipeline  
20 specific provisions. An operator in multiple  
21 industry trades requested that PHMSA delay the  
22 hydrogen aspects of the proposal.

1 Continuing on here with general  
2 comments regarding hydrogen: An operator said  
3 that new requirements of hydrogen pipelines  
4 should align with 49 CFR Part 192 and other  
5 standards to avoid confusion. NAPSR requested  
6 clarity on the applicability of the proposed  
7 rule to hydrogen pipelines. The Attorney  
8 General of New York, et al. recommended PHMSA  
9 prioritize publishing hydrogen-specific  
10 pipeline regulations. And the town advisory  
11 committee said that separate regulations should  
12 be developed for hydrogen and other gases.  
13 They requested this rule be limited to natural  
14 gas.

15 Continuing on. Multiple industry  
16 trades and an operator said that the final rule  
17 should exclude pure hydrogen gas from emissions  
18 reductions measures, due to its unique  
19 environmental attributes. The commenters also  
20 stated that aspects of the NPRM are not  
21 feasible when applied to leaks of pure hydrogen  
22 and require additional research before

1 operators can effectively implement these  
2 technologies in an effective leak detection and  
3 repair program, again, one of those programs  
4 being specific to hydrogen. Environmental  
5 advocacy groups urge PHMSA to increase  
6 engagement on hydrogen safety standards with  
7 the environmental justice communities and other  
8 stakeholders.

9 And finally, environmental advocacy  
10 groups stated that existing leak survey  
11 practices are of limited effectiveness, as  
12 recent data from hydrogen pipeline operators  
13 reported zero leaks repaired or planned for  
14 repair in 2022.

15 PHMSA notes that Part 192 applies to  
16 hydrogen pipelines, including existing leak  
17 detection and repair requirements. PHMSA  
18 appreciates the comments and concerns with  
19 respect to the applicability of natural gas  
20 standards for pipelines transporting pure  
21 hydrogen gas. And PHMSA requests committee  
22 discussion on the proposed revisions to Part

1 192 as it applies only to pipelines  
2 transporting pure hydrogen gas.

3           Regarding the patrol requirements as  
4 they apply to hydrogen gas pipelines: In Part  
5 192, Section 705, an operator noted that  
6 patrolling to identify leaks on a pipeline  
7 transporting hydrogen is not value-added.  
8 Hydrogen does not leave vegetation marks like  
9 natural gas and dissipates quickly. Applying  
10 these requirements to hydrogen is wasteful,  
11 dangerous, and will not result in a safer  
12 pipeline or lower emissions of a nearly non-  
13 greenhouse gas-causing product. PHMSA notes  
14 that the committee previously recommended a  
15 patrol frequency of six times each calendar  
16 year for gas transmission lines.

17           Regarding the ALDP performance  
18 standard as it applies to a hydrogen gas  
19 pipeline under Part 192, Section 763, Paragraph  
20 B: An industry trade group disagrees with the  
21 NPRM's apparent premise that leak detection  
22 technologies that are effective and appropriate

1 for methane can be applied to pipelines  
2 transporting unblended hydrogen. The commenter  
3 recommended that PHMSA modify proposed Section  
4 763C, so that it is flexible enough to  
5 meaningfully accommodate new, innovative, and  
6 effective leak detection technologies that may  
7 be developed in the future for unblended  
8 hydrogen pipelines. Another operator said that  
9 there are no commercially available leak  
10 detection devices that can reliably detect  
11 hydrogen at the 5 parts per million level. An  
12 environmental advocacy group recommended PHMSA  
13 address pure hydrogen pipelines holistically  
14 and defer applying the proposed standards to  
15 unblended hydrogen pipelines.

16 Continuing on regarding the ALDP:  
17 The Pipeline Safety Trust proposed that if  
18 hydrogen leak detection equipment is not  
19 readily available, then hydrogen pipeline  
20 operators should be required to use the  
21 alternative ALDP performance standard by  
22 default. This would give PHMSA insight into

1 current leak detection and repair practices  
2 being used by the existing industry.

3 An industry trade states that unlike  
4 methane, hydrogen can be detected only when in  
5 direct contact with a potential hydrogen leak  
6 plume. For methane surveying, large distances  
7 of pipeline through remote sensing is  
8 practical. Hydrogen cannot be reliably  
9 detected remotely outside of the leak plume. A  
10 hydrogen pipeline operator suggested the leak  
11 detection equipment for pure hydrogen have a  
12 minimum equipment sensitivity of 25 parts per  
13 million.

14 PHMSA notes regarding the ALDP:  
15 PHMSA notes that Part 192 applies to hydrogen  
16 pipelines, including existing leak detection  
17 and repair requirements. And the GPAC  
18 previously recommended changes to the ALDP  
19 performance standard applicable to gas  
20 transmission and distribution lines generally.

21 Regarding leak grading and repair  
22 for hydrogen gas pipelines under Part 192,

1 Section 760, we received comments as follows:  
2 Multiple industry trades and an environmental  
3 advocacy group expressed opposition to  
4 classifying hydrogen leaks as at least a Grade  
5 2. The commenters noted the National Renewable  
6 Energy Laboratory report noted in the NPRM does  
7 not support the Grade 2 minimum. An operator  
8 added that low percentage blend should be  
9 allowed a Grade 3 classification.

10 The Attorney General of New York, et  
11 al. requested clarity regarding the grading of  
12 hydrogen and methane blends. And a hydrogen  
13 transportation equipment vendor commented that  
14 grading and repair criteria should be  
15 applicable to pipelines that lack a secondary  
16 method of leakage capture as part of the system  
17 design, such as that used in a double-walled  
18 containment type of pipeline.

19 An operator commented that  
20 transporting pure hydrogen is very sensitive to  
21 additional costs due to lower margins in  
22 smaller markets, and that excessive compliance

1 burdens could reduce or eliminate the otherwise  
2 beneficial use of hydrogen. PHMSA notes here  
3 that the GPAC previously recommended changes to  
4 the leak grading criteria, repair timelines,  
5 and related requirements applicable to gas  
6 transmission and gas distribution lines in  
7 general.

8           Regarding the reporting requirements  
9 in Part 191 in Sections 11 and 17: We received  
10 a comment from the Pipeline Safety Trust,  
11 multiple public and environmental advocacy  
12 groups, and an individual commenter in which  
13 they suggested reporting requirements in Part  
14 191 on natural and hydrogen gas mixing be  
15 expanded to maximize transparency and community  
16 safety.

17           We note and we say PHMSA appreciates  
18 this comment and propose an information  
19 collection in the Federal Register today, March  
20 25th, 2024. In that notice, PHMSA proposes to  
21 modify several forms and instructions to  
22 collect information and identify trends related

1 to the blending of hydrogen gas and natural gas  
2 within gas pipelines. PHMSA encourages public  
3 industry and the committee to review the notice  
4 and offer comment during the comment period.  
5 The PHMSA docket for that information  
6 collection notice is PHMSA, P-H-M-S-A, dash  
7 2022 dash 0085.

8 Back to John.

9 MR. DANNER: All right. We go to  
10 public comment?

11 MR. GALE: Yeah. That's correct,  
12 Chairman. Back to public comment. Yeah.

13 MR. DANNER: All right.

14 So let us now turn to public  
15 comment. Let me ask if anyone has comments,  
16 please, there's a microphone to my right, and  
17 just please get in line, introduce yourself,  
18 give us your name, and provide your comments.  
19 Thank you.

20 MR. WILLIAMS: Thank you, Mr.  
21 Chairman.

22 Chris Williams from Cheniere Energy,

1       representing INGAA and API. We just want to  
2       reiterate that we are in agreement with  
3       previous kind of industry comments regarding  
4       the broad subject of leak detection. We do  
5       want to note that Section 113 does not apply  
6       specifically to LNG facilities, notwithstanding  
7       that we do recognize that the industry is  
8       currently working toward minimizing methane  
9       leaks in broad efforts.

10               We do want to acknowledge for the  
11       committee that large-scale liquefaction  
12       facilities are very complex, and very large  
13       facilities have many areas that are not very  
14       accessible for what we would consider  
15       traditional handheld leak detection methods.  
16       So the committee should consider alternative  
17       methods for leak detection, and specifically,  
18       those that are in alignment with state programs  
19       that are in regulation for some facilities that  
20       are already out there.

21               Finally, we would ask the committee  
22       to recognize that minimizing leaks is the goal,

1 not complete elimination of all leaks at  
2 facilities. Finally, we would like for PHMSA  
3 to consider alternative proposals by the  
4 industry that are equivalent for minimizing  
5 emissions during boil-downs and boil-offs.

6 Thank you.

7 MR. DANNER: Thank you very much.

8 MR. WILLS: Good afternoon. How are  
9 you guys? My name is Ron Wills. I'm the  
10 director of North American Pipeline Operations  
11 for Air Products. Air Products is an  
12 industrial gas and technology company and is  
13 the world's largest producer of hydrogen. Air  
14 Products also operates hydrogen pipelines all  
15 around the world, including Europe, Canada,  
16 Thailand, and in the United States. This  
17 includes the largest pure hydrogen transmission  
18 pipeline network in the world, located in the  
19 Gulf Coast.

20 Air Products appreciates the  
21 opportunity to be heard today. Air Products  
22 has safely operated hydrogen transmission

1 pipelines for over 40 years. Air Products  
2 operates more than 700 miles of hydrogen  
3 pipeline, representing more than a third  
4 hydrogen pipeline mileage in the U.S. Air  
5 Products agrees that minimizing leaks from all  
6 pipelines is an important objective, and we  
7 have a program in place for promptly, you know,  
8 detecting and repairing these leaks of hydrogen  
9 pipelines. Air Products, like -- hydrogen  
10 aspects of the, you know, proposed rulemaking  
11 that's going on today is concerned that  
12 treating hydrogen -- unintended negative  
13 consequences and disregards important  
14 differences between methane and hydrogen when  
15 it comes to leak detection technology and risk.

16 Pipeline transport of methane and  
17 hydrogen is similar in many ways, but there are  
18 important distinctions that warrant a different  
19 approach when it comes to leak detection and  
20 repair. For example, these technologies  
21 available for sensing hydrogen leaks in the  
22 field are simply not well-developed as those

1 for natural gas. While there are a variety of  
2 commercially available handheld hydrogen  
3 detectors, they are not useful for hydrogen  
4 leak detection in the real world, outdoor  
5 environment. The specific gravity of hydrogen  
6 and its velocity in the leak scenario mean that  
7 currently available handheld detectors are not  
8 effective outside of a controlled environment  
9 in the lab.

10 Air Products supports further study  
11 of hydrogen leak detection, given the promise  
12 that these new, yet to be developed  
13 technologies may hold in advancing hydrogen  
14 pipeline safety. Our primary objective for  
15 this rulemaking is to reduce methane emission  
16 and to address underlying mandates related to  
17 this objective. Hydrogen is out of the scope  
18 of those core objectives. As a result, given  
19 the lack of hydrogen-related statutory mandate  
20 and the need for further study on hydrogen leak  
21 detection technologies, Air Products  
22 respectfully requests that hydrogen be excluded

1 from the new rule so that additional study can  
2 be performed on informed rulemaking necessarily  
3 for it to be designed. Once additional -- Air  
4 Products welcomes the opportunity to engage  
5 with PHMSA and others on our next step. Thank  
6 you.

7 MR. DANNER: Thank you very much.

8 MR. TAYLOR: Eric Taylor from BHE.

9 So my comments are just actually a couple of  
10 points. We would like to see PHMSA have  
11 similar application as we saw with the  
12 compressor stations for LNG. If there are  
13 state programs that apply currently, we want to  
14 make sure that those are taken into account so  
15 we don't have a PHMSA program overlapping with  
16 a state program. The LNG sensitivity  
17 requirements, similar to what we saw for the  
18 transmission pipeline for ALDP, we think those  
19 could apply universally, again, similar to, I  
20 think, what PHMSA had.

21 And then maybe just backing up what  
22 was just said, but from a hydrogen standpoint,

1 we would expect a separate rulemaking with  
2 applicable technology. We just don't believe  
3 that technology is there. The focus of this  
4 rule really was methane emission reductions.  
5 Thank you.

6 MR. DANNER: Thank you.

7 MR. KOCHMAN: Hi. Ben Kochman,  
8 representing the Interstate Natural Gas  
9 Association of America, and I appreciate the  
10 opportunity to have public comment on this  
11 important subject. I just wanted to flag that  
12 currently right now, and I know that there's  
13 been a lot of discussions thus far about pure  
14 hydrogen pipelines, but there are no  
15 transmission interstate operators that  
16 currently engage in standard operating  
17 practices or procedures to blend hydrogen into  
18 existing natural gas pipelines. And just as  
19 any part of final rulemaking that PHMSA would  
20 institute on this subject, just hope that you  
21 would consider that. It's a little difficult  
22 to regulate something that isn't quite there

1 yet. So I just wanted to put that out there  
2 for PHMSA's consideration, the committee's  
3 consideration, and appreciate your time today.  
4 Thank you.

5 MR. DANNER: Thank you.

6 MR. LANG: Good afternoon. My name  
7 is Kevin Lang. I'm the director of engineering  
8 services for Southwest Gas Corporation. Just  
9 as a way of context, Southwest Gas operates in  
10 Arizona, California, and Nevada. We serve  
11 about 2.2 million customers of 59,000 miles of  
12 distribution main and service and about 1,400  
13 miles of interstate and intrastate pipelines in  
14 those three states.

15 We also operate two LNG plants that  
16 would be impacted by the proposed changes to  
17 Part 193. Specifically, these plants are  
18 equipped with stationary gas detectors that  
19 continuously monitor the plant for malfunctions  
20 and other hazardous conditions that could  
21 present hazards to the plant, the personnel, or  
22 the public. These detectors are monitored from

1 local control centers 24/7.

2           Additionally, I wanted to talk a  
3 little bit about the Preliminary Regulatory  
4 Impact Analysis. PHMSA indicated in their PRIA  
5 that they did not evaluate the cost-  
6 effectiveness for the added quarterly leak  
7 detection surveys. Based upon Southwest Gas'  
8 preliminary calculations, we're estimating that  
9 adding that leak survey requirement for our  
10 plants would likely be in the range of about  
11 60- to \$70,000 a year per plant. Taking that  
12 high-level estimate, multiplied by the 165 LNG  
13 plants that PHMSA identified in the PRIA would  
14 likely result in an estimated total cost to the  
15 industry of about 9.9 to \$11.6 million. So our  
16 suggestion was just for PHMSA to take a deeper  
17 look at that, use those cost estimates, and  
18 update the PRIA accordingly.

19           My next comment is going to be on  
20 the area of hydrogen. Southwest Gas does not  
21 currently operate any hydrogen pipelines. We  
22 have been looking at hydrogen blending, like

1 most of the industry is. We're currently  
2 evaluating several pilot programs behind the  
3 meter set, so they would not be 192  
4 jurisdictional. However, we have submitted a  
5 pilot proposal to the State of California that  
6 would propose a small level of blending to an  
7 isolated distribution system in Truckee,  
8 California.

9 And I provide that context because  
10 that's currently written. The proposed  
11 language in 192, 760(c)(1), romanettes viii, I  
12 believe it is, language could be misinterpreted  
13 to apply to any pipeline that could  
14 occasionally include any amount of hydrogen,  
15 whereas based upon the context in the preamble,  
16 it appears that PHMSA was focusing on dedicated  
17 hydrogen pipelines. And as a point of  
18 reference, I believe most of the industry's  
19 tariffs allow for some very small amount of  
20 hydrogen in the gas stream. So we believe  
21 PHMSA should consider clarifying that intent,  
22 especially as the advent of many operators

1 looking at hydrogen blending pilots could be  
2 negatively impacted by the requirements of any  
3 leak being a minimum of Grade 2 if it involves  
4 hydrogen. So thank you. Appreciate the  
5 opportunity.

6 MR. DANNER: Thank you very much.

7 MS. JAWORSKI: My name is Ann  
8 Jaworski. I'm with Earthjustice. On LNG, we  
9 would like to say that we support PHMSA's  
10 proposal to require quarterly methane leakage  
11 surveys and remediation of leaks discovered  
12 within one month of discovery. We would also  
13 urge PHMSA to strengthen this requirement to  
14 provide clarity that operators would be  
15 required to satisfy the advanced leak detection  
16 program technology standards.

17 And we would just like to note that  
18 communities that are near LNG facilities are  
19 incredibly concerned about the safety risks  
20 that these large facilities create. And the  
21 Preliminary RIA did note that the vast majority  
22 of reported leaks at LNG facilities originated

1 from plant piping and equipment, with most  
2 caused by equipment failure. These leakage  
3 surveys would help to quickly identify these  
4 leaks and make the facilities safer as an  
5 interim step until PHMSA completes its planned  
6 Part 193 LNG facilities role. And we would  
7 also urge PHMSA to consider requiring  
8 continuous monitoring systems at LNG  
9 facilities.

10 And then on the subject of hydrogen,  
11 we believe that the alternative ALDP standard  
12 should apply to dedicated hydrogen pipelines as  
13 an appropriate interim step until PHMSA can  
14 undertake a future rulemaking with robust  
15 community engagement to address hydrogen's  
16 unique safety and environmental risks. And we  
17 do urge PHMSA to do that standalone rulemaking.  
18 There are tax credits and other federal  
19 policies that are incentivizing a huge planned  
20 build out of dedicated hydrogen pipelines, and  
21 neither the current gas pipeline standards nor  
22 these current proposed leak detection standards

1 are specifically tailored to the unique  
2 engineering and safety challenges that are  
3 created by hydrogen.

4 And we would also support a  
5 requirement for operators to report when  
6 they're blending hydrogen into existing gas  
7 distribution pipelines, which are subject to  
8 this rule's leak detection standard. And we  
9 note the information collection request that  
10 PHMSA has just issued on this topic and  
11 appreciate PHMSA's recognition that this  
12 information is important to collect and to help  
13 PHMSA tailor any future rule makings to the  
14 different ways that these blends might create  
15 slightly different risks and challenges as  
16 compared to a methane-only pipeline. Thank you  
17 for the opportunity to provide comment.

18 MR. DANNER: Thank you very much.

19 MR. ZANDAROSKI: Good afternoon. My  
20 name is Mike Zandaroski. I'm the manager of  
21 engineering gas standards for CenterPoint  
22 Energy. CenterPoint Energy operates a small

1 pilot hydrogen plant in Minneapolis, Minnesota,  
2 which can produce up to 60 dekatherms of  
3 hydrogen gas per day. The hydrogen produced at  
4 this plant provides up to a blend of 5 percent  
5 of hydrogen and natural gas mixture that is  
6 dispersed into a large diameter distribution  
7 system and is carried to homes and businesses  
8 across the greater urban Minneapolis area.

9 Thus, I want to make the point that  
10 it's imperative to differentiate the 100  
11 percent hydrogen and the hydrogen blending  
12 pipelines with regards to allowing the Grade 3  
13 leaks in blended lines versus the 100 percent  
14 hydrogen lines. And again, I think it's very  
15 important, as other commenters have said, to  
16 separate the hydrogen leak detection equipment  
17 versus those with the blended lines. So thank  
18 you.

19 MR. DANNER: Thank you very much.

20 MR. LONN: Hi. I'm Richard Lonn, on  
21 behalf of Southern Company Gas. Southern  
22 Company Gas, for those of you who don't know,

1 we are one of the largest LDCs in the country.  
2 We operate in four states, 4.4 million  
3 customers, about 150,000 miles of pipeline in  
4 the country. We also operate four LNG plants.

5 First off, I wanted to thank PHMSA  
6 for that note on the slide I just saw about the  
7 issue of minimization. I think that's an  
8 important issue. It was one I was going to  
9 raise. Reducing versus minimizing, we talked  
10 about this a lot in the first week here, but I  
11 did appreciate that note. I also wanted to say  
12 we are certainly firm supporters of the  
13 industry comments as it relates to these  
14 issues.

15 As far as LNG plants, you heard some  
16 earlier discussion about fixed sensors. We  
17 have fixed sensors at all of our plants. Not  
18 all LNG facilities have those. But as you  
19 consider the leak survey aspects of the  
20 proposed rule, I would like to suggest that  
21 there should be an either/or there. Those  
22 fixed sensors pick up the gas leaks

1 immediately. It seems redundant and  
2 unnecessary and a waste of rate payer money to  
3 go leak survey facilities which have 7/24  
4 monitoring already. So I certainly would  
5 suggest that.

6 The second part would be that you're  
7 mandating a quarterly leak survey of the LNG  
8 plants, and I would suggest that LNG plant  
9 piping is not more hazardous than a  
10 transmission line. You certainly shouldn't go  
11 to a standard beyond where you've gone with  
12 transmission lines. And so either an annual  
13 standard would work, or if you're tying it to  
14 class location, something like that. But to  
15 push LNG beyond where you've pushed the biggest  
16 pipelines in the nation doesn't seem right,  
17 either. So that's really all I had on the LNG.

18 On the hydrogen side, I wanted to  
19 say we are very excited about the opportunities  
20 that we see with hydrogen. We don't currently  
21 have hydrogen pipelines in Southern Company  
22 Gas, but we are on several consortiums working

1       towards the issue of blended pipelines. The  
2       thing that most concerns us beyond what's in  
3       the joint industry comments is the issue of  
4       Grade 3 leaks in that regard. When you're  
5       dealing with a blended system that the  
6       regulation is written in such a way that there  
7       is no Grade 3s where there's any hydrogen  
8       involved, that needs to be clarified to allow  
9       blendeds to be treated just like it's a natural  
10      gas system for grading. Otherwise, you're  
11      going to create mayhem because we, as LDC  
12      operators, will have to track the actual atoms.  
13      Where did the hydrogen come into a mixed  
14      system, if that makes sense? And where did it  
15      flow and if you've got to apply a different  
16      standard. So please try and be consistent.  
17      Thank you very much.

18               MR. DANNER: Thank you very much.

19               MR. JOHNSON: Hello. My name is  
20      Maury Johnson. I'm not an agency person or an  
21      industry person or a member of a group. I'm  
22      just a landowner. Some people say I'm a

1 nobody. So I'm here to represent all those  
2 millions of nobodies across this country who  
3 live with a pipeline in their backyard, in  
4 their communities where they live, work, and  
5 play. I want to thank everybody in this room  
6 who are generally working for safety. Thank  
7 you.

8 But I do want to push back on one  
9 statement I heard this morning at 9:25 a.m.  
10 Someone from the industry said something to the  
11 effect that the industry didn't know that  
12 methane or greenhouse gases were going to be a  
13 problem until recently. Back home we call that  
14 male bovine excrement, or BS. With all the  
15 reporting that you've heard in the last few  
16 years, you've heard that the industry's own  
17 records show they knew this was going to be a  
18 problem and knew it for about 50 years.

19 In order to address a problem, you  
20 must be first honest and acknowledge you have a  
21 problem. For example, back in April of 1970,  
22 Apollo 13 was on a mission to the moon, and

1 they said, Houston, we have a problem. Our  
2 life support system is damaged, and we got to  
3 fix this problem. That was almost 54 years  
4 ago. Just a few days from now, it'll be 54  
5 years.

6 Well, Houston, we have a problem.  
7 Our spaceship, earth, has a critical problem.  
8 Our life support system is imperiled. We've  
9 got to fix these problems, and we got to  
10 acknowledge we have these problems. And again,  
11 I would like to thank everybody who is actually  
12 working on the problems. I agree with the  
13 young lady from Earthjustice.

14 MR. DANNER: Thank you very much,  
15 Mr. Johnson.

16 MR. CARAM: Hi. Bill Caram,  
17 Pipeline Safety Trust. I want to talk a little  
18 bit about hydrogen. Hydrogen does pose unique  
19 safety risks. It's also an indirect greenhouse  
20 gas with more than 30 times the warming power  
21 of CO2 in the first 20 years. And it does that  
22 by intensifying the effect of methane in the

1 atmosphere. So this does seem like an  
2 appropriate place for these rules.

3 But as many have mentioned, the leak  
4 detection technology is not nearly as sensitive  
5 and advanced as it is for methane. So we  
6 support the use of the alternative program for  
7 hydrogen, both pure and in blends. We also  
8 support a future rulemaking for more specific  
9 safety regulations, and given the safety risks  
10 and the knowledge gaps that remain and have  
11 been highlighted many times, we do support that  
12 no Grade 3 leaks until those knowledge gaps are  
13 filled and safety can be demonstrated,  
14 especially on the blending of hydrogen in  
15 distribution systems that were not designed for  
16 the presence of hydrogen. And I also want to  
17 add that we really appreciate the information  
18 collection effort by PHMSA on the blending. So  
19 thank you.

20 MS. SAXMAN: Good afternoon.  
21 Annette Saxman with National Grid. We own and  
22 operate a combined 23 LNG plants, which

1 includes peak shaving and various mobile  
2 plants. These plants can supply about 812 MMcf  
3 per day in vaporization capacity. They play a  
4 vital role in providing energy supply security  
5 to the Northeast region. PHMSA should consider  
6 the unique nature of operations of peak shaving  
7 facilities and their importance to reliability  
8 as related to repair timeframes within this  
9 proposal.

10 LNG facilities are already subject  
11 to leak detection and repair requirements under  
12 statutes or regulations administered by the  
13 U.S. Environmental Protection Agency or  
14 another federal or state agency. If a LNG  
15 facility is already subject to LDAR  
16 requirements that provide adequate protection  
17 to public safety and the environment, there is  
18 no reason for PHMSA to add duplicative and  
19 potentially inconsistent regulations on that  
20 same topic in Part 193.

21 Furthermore, PHMSA's proposal to  
22 include an exemption for compressor stations on

1 gas gathering and transmission lines that are  
2 subject to EPA's LDAR regulation supports the  
3 conclusion that regulations in Part 193 are  
4 unnecessary for LNG facilities that are subject  
5 to these comparable provisions under other  
6 statutes or regulations. Lastly, applying the  
7 leakage survey requirements to mobile or  
8 temporary facilities is unnecessary. These  
9 mobile and temporary LNG facilities are often  
10 in standby mode or being relocated,  
11 reconnected, and re-pressurized. And there's  
12 no indication on the record that these non-  
13 stationary LNG facilities are a significant  
14 source of methane emissions. Thank you.

15 MR. DANNER: Thank you very much.

16 MR. MOORE: Hello. My name is Daron  
17 Moore, representing Air Liquide Pipeline.  
18 Thanks to PHMSA and the committee for the  
19 opportunity to comment. Air Liquide operates a  
20 pure hydrogen system, mostly along the Gulf  
21 Coast of Texas and Louisiana. It should be  
22 noted that pure hydrogen systems in the United

1 States total about 1,600 miles where there are  
2 approximately 2.6 million miles of natural gas  
3 pipelines in the United States. So it's a very  
4 small piece of the industry infrastructure.

5 It should also be noted that the  
6 hydrogen leak rate is about 60 percent the rate  
7 of the national methane rate of leaks on the  
8 pipelines as reported on the annual reports,  
9 again, indicating not much of a problem issued  
10 on the pipeline safety arena. Air Liquide also  
11 presented to PHMSA, the Hydrogen Committee, and  
12 the R&D Committee. They welcomed our  
13 suggestions for putting R&D money into further  
14 leak detection devices and methodologies  
15 because, as had been previously noted, we can't  
16 really get below about 25 ppm in the real world  
17 on finding leaks along the pipeline. There are  
18 no commercial technologies that will get  
19 anywhere near the 5 ppm, and the ALDP is  
20 extraordinarily costly for hydrogen. We  
21 support leak surveys, however, that are  
22 effective and cost-efficient, of course.

1                   And finally, in the area of operator  
2                   qualification, it hasn't been mentioned yet  
3                   today in this discussion, but it was in the  
4                   NPRM, reporting and repairing are frequently  
5                   not done. In fact, they're never done for Air  
6                   Liquide by the same people as the NPRM implies.  
7                   There's actually been more spent on  
8                   investigation than any leak solving would be  
9                   taking place, particularly when you take into  
10                  account a company truck like mine, that's an F-  
11                  150 driving 200 miles round trip twice to do  
12                  investigation reports on any slight leak that  
13                  might be detected. Thank you for the  
14                  opportunity to comment.

15                 MR. DANNER: Thank you very much.

16                 All right. I think that concludes  
17                  the public comment on LNG and hydrogen. Let me  
18                  take this opportunity. If any of the members  
19                  of the committee had questions for Clayton  
20                  Bodell after his presentation, I neglected to  
21                  ask you if you had clarifying questions for  
22                  him. So this is an opportunity if anyone does.

1 All right. Andy Drake?

2 MR. DRAKE: This is Andy Drake,  
3 Enbridge. A comment from the public just  
4 sparked a thought. You know, we have been very  
5 clear about the EPA. It has a lot of very  
6 specific and active efforts in this front. How  
7 does that fit together in this theater with  
8 LNG? I mean, we don't need to reinvent the  
9 wheel here.

10 If EPA has done something on sites,  
11 like they have compressor stations and other  
12 things, how does that overlap with or fit in  
13 with PHMSA's efforts on LNG site-specific  
14 sources here?

15 MR. PALABRICA: Yeah. So that's one  
16 of the topics that we request Committee  
17 feedback on. So we've spoken to EPA as well.  
18 Yeah. So that's something that we could  
19 certainly consider based on the public comment  
20 or committee recommendations, to the extent  
21 that such facilities are compressor affected  
22 facilities subject to the Quad 0 standards.

1 MR. DANNER: All right. Erin  
2 Murphy?

3 MS. MURPHY: Thanks.

4 Erin Murphy, Environmental Defense  
5 Fund. I think I'm just similarly trying to see  
6 if we can get to clarification here, and maybe  
7 we're not able to right now if folks haven't  
8 heard back from EPA. But my understanding of  
9 the proposal was that PHMSA's proposed standard  
10 is applicable to the piping in an LNG facility,  
11 and that specific part of the infrastructure is  
12 not already covered by EPA's Quad 0 standards  
13 for compressor stations. And so my read there  
14 was that PHMSA's proposal is a quarterly leak  
15 survey, which is comparable to the EPA  
16 standards for the adjacent infrastructure, so  
17 that this would basically be an aligned  
18 standard for quarterly surveys. But I don't  
19 know if PHMSA can clarify if that's a correct  
20 understanding.

21 MR. PALABRICA: Sorry for that.  
22 That we would have to consider. I know on the

1 transmission side, it's like to the extent that  
2 the facility is covered by the EPA monitoring,  
3 that's when the exception would apply. But  
4 that's something that we would consider with in  
5 reviewing those comments and recommendations.

6 MR. DANNER: Thank you. Arvind?

7 MR. RAVIKUMAR: Yep.

8 I just quickly looked through the  
9 EPA final rule. And nowhere does it say in the  
10 rule that liquefied natural gas terminals are  
11 included in the compressor station section. So  
12 I request some clarification on what's covered  
13 and what's not.

14 MR. DANNER: Go ahead, Sayler.

15 MR. PALABRICA: Yeah.

16 So we had a sort of similar concern  
17 when we saw those comments and we discussed  
18 with EPA. So our understanding from the  
19 discussion with them is that to the extent that  
20 a LNG facility is a compressor affected  
21 facility or other type of facility subject to  
22 EPA emissions monitoring upstream of a city

1 gate station, then it's covered under the Quad  
2 0 rules. But LNG plants as, like, its own  
3 category is not, like, one of the categories  
4 subject to emissions monitoring. So it's if it  
5 falls under one of the other categories  
6 covered.

7 MR. DANNER: All right. Thank you.

8 Is there any follow-up questions  
9 there?

10 Sara Gosman?

11 MS. GOSMAN: I have another just  
12 clarifying question on the proposed  
13 regulations. So I know we're going to talk  
14 about mobile LNG facilities. So would an  
15 operator be subject to the leak survey  
16 standards if they were following the NPFA 59A  
17 standard? I just had difficulty determining  
18 whether that was going to be a requirement that  
19 was going to take them out, right, or not.

20 Thanks.

21 MR. PALABRICA: Yeah. So when we  
22 reviewed NFP 59A, that does not include the

1 periodic leakage survey requirement for those  
2 mobile and temporary facilities. And just for  
3 some background on that, Part 193 generally  
4 accepts mobile and temporary facilities, and  
5 they're instead required to comply with NFPA  
6 59A. But from our review, leakage surveys,  
7 it's not part of that.

8 MR. DANNER: Go ahead.

9 MS. GOSMAN: So you would be adding  
10 leakage surveys?

11 MR. PALABRICA: Yes, that was the  
12 proposal.

13 MS. GOSMAN: Okay. Thank you.

14 MR. DANNER: Okay. Oh, Andy Drake?

15 MR. DRAKE: Just a casual  
16 observation here. Based on the comments up  
17 there, does it make sense to separate hydrogen  
18 and the LNG discussions? Hydrogen seems like  
19 it's in a very different maturity place and  
20 confidence space than this other discussion.

21 Should we handle them a little bit  
22 separately?

1                   MR. DANNER: We certainly can. I  
2 just don't know what considerations PHMSA had  
3 when they put them together. John?

4                   MR. GALE: Oh, we think it's totally  
5 appropriate to have the discussion right now  
6 and just focus one either on LNG or hydrogen,  
7 separately. And, you know, the order is just  
8 up to the committee at that point.

9                   MR. DANNER: So all right. So we  
10 might end up having either two votes, or we can  
11 discuss them separately. We don't have to  
12 discuss them as a group. So okay.

13                   Any other questions for our friends  
14 at PHMSA? Erin?

15                   MS. MURPHY: Erin Murphy, EDF. I  
16 guess it's a question for PHMSA. So the three  
17 sub-bullets under LNG, should we be approaching  
18 this as those are the three topics to discuss  
19 and it's possibly three different areas to vote  
20 on, or are we trying to see if we can have  
21 consensus on all of these together in a single  
22 vote on LNG? Just helpful for planning the

1 discussion.

2 MR. DANNER: I don't know that  
3 that's a question for PHMSA. It's probably  
4 more of a question for the committee. But, I  
5 mean, what we have up there is PHMSA requests  
6 our recommendations, and there are these three  
7 topics with regard to LNG. Should we just  
8 begin the discussion and take them from the  
9 top, leakage survey requirements for LNG  
10 facilities and exceptions for facilities  
11 covered by EPA missions monitoring  
12 requirements?

13 Thoughts on how we should address  
14 that? Chad Zamarin?

15 MR. ZAMARIN: Thanks.

16 Chad Zamarin, Williams. Yeah, I  
17 generally, heard a theme, and we discussed it  
18 back when we were talking about transmission,  
19 that I think we should avoid duplicative or  
20 overlapping jurisdiction. And if a facility is  
21 subject to EPA or a state program that has  
22 jurisdiction that PHMSA shouldn't overlap with

1       that and should adopt that as the governing  
2       program, that would seem to make sense. I  
3       think we included some language like that in at  
4       least one of the votes from our last meeting,  
5       that as a principle, we shouldn't have  
6       overlapping, potentially conflicting programs.

7               MR. DANNER: All right. Thank you  
8       for that.

9               Now I do have a question for PHMSA  
10       because, you know, as much as we want to avoid  
11       overlap, we want to promote coordination. And  
12       to what extent will PHMSA have the information  
13       it needs if it's says we're going to stand down  
14       and there'll be state programs and EPA, you  
15       know? Do you have the information that you  
16       need as a regulatory agency?

17              Sayler?

18              MR. PALABRICA: I think so. It's  
19       similar to what was proposed for the gas  
20       transmission and gathering compressor stations.  
21       Yeah. So yeah, just documentation of the  
22       determination I think would be sufficient. But

1       that's something that we can work through  
2       implementation as well.

3               MR. DANNER: All right. Thank you.

4               Chad, did you have a follow-up?

5               MR. ZAMARIN: Sorry. No. That  
6       answered the question.

7               And I think I was going to reinforce  
8       that from an operator perspective. I think  
9       there would need to be a demonstration that  
10      there is a program that is governing. So I  
11      think the language was something to the effect  
12      that if there is an existing program in place,  
13      and there would have to, obviously, be a  
14      demonstration that there is a set of  
15      requirements that are governing over the  
16      facility.

17              MR. DANNER: Thank you. Erin  
18      Murphy?

19              MS. MURPHY: Erin Murphy, EDF. I  
20      think I'm in agreement with that point and  
21      maybe would just add some more context from my  
22      perspective. It seems like the discussion and

1 my understanding of the proposal is that  
2 PHMSA's proposed leak survey standards for LNG  
3 facilities may include facilities that are not  
4 covered under EPA's Quad 0 standards, but there  
5 may be some facilities that are covered or some  
6 parts of some facilities.

7 So I think from my perspective,  
8 supporting the quarterly leak survey and repair  
9 standard proposed by PHMSA as a backstop and  
10 then if an operator can demonstrate that the  
11 EPA standard is applicable and they can  
12 document that, then that could apply. And I  
13 think, at least from my view, the hope is there  
14 that they're at least relatively consistent,  
15 like the PHMSA standard as the backstop is a  
16 quarterly leak survey, which is comparable to  
17 the EPA standard for sort of adjacent  
18 infrastructure.

19 MR. DANNER: And Chad Zamarin also  
20 mentioned state program. So if it's covered by  
21 an EPA program or if it's covered by a state  
22 program, would that be sufficient as well?

1 MS. MURPHY: I think throughout this  
2 rulemaking, there's been a real emphasis on the  
3 benefit of a national standard. So I guess  
4 it's a little tough to think that through if  
5 there could be various different, you know,  
6 state standards around the country. If that  
7 state standard was, you know, falling below the  
8 level of the PHMSA standard, then that seems  
9 concerning. And I think from my perspective,  
10 there should be a federal baseline of quarterly  
11 leak surveys.

12 MR. DANNER: Right. And I wouldn't  
13 disagree with that. It's just there are some  
14 states that have very vigorous standards, in  
15 which case, you know, is it necessary to have  
16 duplication in those areas? And I think PHMSA  
17 would be able to identify which ones are up to  
18 snuff and which ones may fall short. That's my  
19 own view of that. Chad?

20 MR. ZAMARIN: Thanks.

21 Chad Zamarin, Williams. I was just  
22 going to reinforce that point. There are, in

1 fact, state programs that follow EPA  
2 guidelines. And so I think we've got to be  
3 careful that we don't kind of blow up the  
4 current kind of structure for how LNG  
5 facilities are currently governed in certain  
6 states. And again, we talked about  
7 conceptually, it's something that has an  
8 adequate level of comparable coverage. But I  
9 do think that's an important concept.

10 MR. DANNER: All right. Thank you.

11 Sara Gosman, and then Erin.

12 MS. GOSMAN: So specifically on the  
13 question of state programs, I would want to  
14 make sure that the PHMSA requirements are, in  
15 fact, the minimum, the baseline. And that what  
16 we would be talking about here is more  
17 stringent requirements, in which case, yes, I  
18 think those should apply. But I don't think  
19 that PHMSA should just remove itself if there  
20 is a state program.

21 MR. DANNER: Thank you. And that is  
22 also consistent with my own thinking. There

1 are very robust state programs, and there are  
2 some state programs that may not be so robust.  
3 And do we leave it to PHMSA to basically  
4 determine which ones are and which ones aren't?

5 Erin?

6 MS. MURPHY: Erin Murphy, EDF. One  
7 point in direct response, and then a second  
8 point on facilities. So first, I agree with  
9 that, and I think, you know, I don't  
10 necessarily feel like that even needs to be  
11 stated in the committee recommendation. I  
12 think that's implicit throughout, right, that  
13 the federal pipeline safety standards are  
14 setting a foundation and then states are able  
15 to go above that foundation with more  
16 protective standards if they desire. So I  
17 guess I worry it might create confusion to be  
18 sort of identifying that as an exception. I  
19 think of it more as a federal foundation, and  
20 then states maybe sort of adding onto that with  
21 more protective standards.

22 The other point I wanted to flag is,

1 and perhaps this is covered in the portions of  
2 facilities language, but I just want to make  
3 sure there's consensus here. I mean, an LNG  
4 facility can be a big and complex facility.  
5 And so if the EPA standard involves surveys or  
6 monitoring at one part of a facility but  
7 doesn't cover the piping and all of the  
8 infrastructure that's PHMSA is proposing to  
9 include in a leak survey and repair standard, I  
10 think that's where, you know, hopefully the two  
11 standards are complimentary and that they're  
12 both on a quarterly basis. And so they would  
13 sort of operate in tandem. So maybe I should  
14 think about whether I want to propose language  
15 to ensure that effect, but I just want to make  
16 sure that point is clear.

17 MR. DANNER: Thank you. Diane?

18 MS. BURMAN: Yeah.

19 I do think it's important sort of  
20 from a level setting. I want to make sure that  
21 good state programs are expressly included in a  
22 way that doesn't somehow, by not talking about

1       it, discount that. I think it gets back to our  
2       discussion back in November in terms of the  
3       adequacy of state programs and making sure that  
4       there's flexibility when we're looking at that.  
5       I do think this also gets back to what are we  
6       trying to accomplish? What are the principles  
7       that we all agree with and just make sure that  
8       we are level setting.

9               MR. DANNER: All right. Thank you  
10       for that. Chad?

11              MR. ZAMARIN: Chad Zamarin,  
12       Williams. I just want to raise maybe a  
13       question and a comment because there are kind  
14       of two different worlds of LNG. I mean,  
15       there's a large-scale liquefaction. These are  
16       the terminals that are being built. You know,  
17       we're now the largest exporter of LNG in the  
18       world. And then we heard a lot of commenters  
19       concerned about small-scale LNG. These are the  
20       peak shaving facilities that are used primarily  
21       to provide reliability to distribution systems  
22       in the wintertime. And I'm not an expert on

1 EPA, Quad 0, and the survey requirements, but  
2 one of the things that was a principle in my  
3 mind is that we try to synchronize the LNG  
4 facilities that are along transmission lines to  
5 the work that we did on transmission.

6 And so what I'm asking is: Are we  
7 concerned about the quarterly reporting on all  
8 LNG facilities, or can that be focused on  
9 large-scale LNG? And if you're a small, you  
10 know, peak shaving facility located along a  
11 transmission line, then you're just going to be  
12 covered by the survey frequencies that we  
13 established in this rule for transmission  
14 lines. Because it seems like those are two  
15 very different things. And I'm not sure we  
16 gain benefit in putting the burden of quarterly  
17 surveys on small-scale liquefaction facilities.  
18 I think you want to focus on the bigger  
19 facilities.

20 MR. DANNER: All right.

21 Any further comment on this? Erin  
22 Murphy?

1 MS. MURPHY: Erin Murphy, EDF. I  
2 appreciate that point from Chad, and maybe just  
3 a response that might be a question. My  
4 understanding is that some of those smaller  
5 peak shaving facilities are often operated, for  
6 example, by utilities. So I guess I'm hearing  
7 you talk about wanting to sort of achieve  
8 alignment with the transmission line standard,  
9 but then I think my thought is, well, but are  
10 those peak facilities typically operated by the  
11 same operator as the transmission line that's  
12 delivering gas to them? Because if they're  
13 different, then I don't know if alignment is  
14 necessarily, like, the best approach or the  
15 most valuable approach.

16 MR. DANNER: Chad, respond.

17 MR. ZAMARIN: Yeah.

18 Chad Zamarin, Williams. Yeah, I  
19 think the unfortunate answer is it varies. You  
20 know, we operate LNG facilities along our  
21 transmission system, just like we operate  
22 underground storage facilities that are used in

1 conjunction with our pipelines to provide  
2 additional flexibility and basically backup  
3 supply for markets. Those are small-scale  
4 facilities relative to the large-scale  
5 liquefaction facilities.

6 That, I think, is really what's  
7 become the primary focus of new regulations, as  
8 we've seen a dramatic ramp-up, you know, in  
9 large-scale liquefaction. I mean, today 14 Bcf  
10 a day. I mean, for about 14 percent of the gas  
11 market is large-scale liquefaction. Hundreds  
12 of small-scale LNG facilities constitute, you  
13 know, of a de minimis amount of LNG relative to  
14 what's large-scale liquefaction.

15 So again, I don't know how the  
16 distribution folks think about the survey  
17 requirements and that we establish for  
18 distribution, but I'm trying to just  
19 understand, you know, are there two different  
20 types of LNG facilities that we're talking  
21 about? Do the rules make sense to be the same  
22 for both, or should it be, you know, different

1 for the large scale versus the small scale?

2 MR. DANNER: I think I would like to  
3 get some clarification on that. We had in  
4 Washington state just a few years ago, a small  
5 LNG facility blow up, and the explosion went a  
6 quarter mile or half mile in each direction,  
7 you know, around it. So what I don't want to  
8 do is I don't want to exclude facilities where  
9 there are potential safety issues. I mean,  
10 this was in a rural area. No one was hurt, but  
11 it could have been a very different outcome if  
12 at a different time of day. And so I just want  
13 to be careful that we're not excluding anything  
14 that's going to compromise safety.

15 MR. ZAMARIN: Thanks.

16 Chad Zamarin, Williams. And just to  
17 be clear, I'm not suggesting any exclusions  
18 here at all. In this particular case, I know  
19 that Erin mentioned the quarterly reporting.  
20 I'm just asking, does it make sense to have  
21 quarterly reporting on small-scale LNG, or  
22 should those follow the survey frequencies that

1 we adopted for transmission and maybe  
2 distribution? And I don't know what makes  
3 sense.

4 But on transmission, it feels like  
5 the two concepts that made sense to me that I  
6 heard from the public comments and that I was  
7 thinking about is making sure there's no  
8 regulatory overlap between EPA, state programs,  
9 and PHMSA and trying to synchronize LNG  
10 facilities with the work that we did on  
11 transmission and distribution where it makes  
12 sense. Thanks.

13 MR. DANNER: All right. Thank you.  
14 Brian?

15 MR. WEISKER: Brian Weisker, Duke  
16 Energy.

17 And, Erin, I think to follow up, the  
18 question that was coming around or Chad asked  
19 around what would a distribution company do for  
20 LNG? So, I mean, the way I would envision it  
21 as far as the facilities that feed or go from  
22 that location, if it's intrastate or

1 transmission or distribution, that the leak  
2 survey of the facilities feeding and going from  
3 would follow what we just agreed to, you know,  
4 a month or two ago when we were here as far as  
5 the leak survey requirements for transmission  
6 annual or the leak survey requirements for that  
7 distribution system. That would be for the  
8 facility feeding and going to and leaving from  
9 that facility.

10 MR. DANNER: All right. Thank you.  
11 Steve?

12 MR. SQUIBB: Steve Squibb, City  
13 Utilities, Springfield, Missouri. I concur  
14 with what Brian just said and just want to also  
15 offer that there are very small-scale LNG peak  
16 shaving facilities with distribution operators  
17 that don't even liquefy. They just truck in  
18 LNG, store it for peak shaving. So very small-  
19 scale LNG operation. Thank you.

20 MR. DANNER: Thank you. Alan?

21 MR. MAYBERRY: I think we're having  
22 a little bit of trouble understanding this

1 differentiation between large scale and small  
2 scale because, you know, from just a logic  
3 perspective, some of these what you might  
4 consider small scale are actually in fairly  
5 populated areas. And these large scale are  
6 very, you know, on large pieces of property, so  
7 along the Gulf Coast for instance; BGE's  
8 facility in Baltimore, for instance, right off  
9 the interstate.

10 So what are you specifically talking  
11 about as far as differentiating the  
12 requirements for small versus large? Yeah.

13 Thank you.

14 MR. ZAMARIN: Yeah. Chad Zamarin,  
15 Williams. Thanks, Alan.

16 And I'm trying to refresh my memory  
17 from what we did last year, but I think in the  
18 last meeting, the survey frequency was based on  
19 class location. And so if you were in an area  
20 where it was higher population, then you would  
21 be surveying quarterly. You would be surveying  
22 more frequently. If you are a small, you know,

1 LNG peak shaving facility located in a Class 1  
2 area and you're surveying that transmission  
3 line or distribution line on an annual  
4 frequency, then the LNG facility, in my mind,  
5 it would make sense to be on an annual  
6 frequency. And so I do think the work we did  
7 in establishing those transmission and  
8 distribution survey frequencies accounted for  
9 the concern that you're raising. And so that's  
10 why I think it makes sense to synchronize those  
11 requirements for LNG as well. Thank you.

12 MR. DANNER: Okay. So, you know,  
13 instead of trying to define that here, I just  
14 wonder if we should just add something that  
15 PHMSA look at, whether it is appropriate to  
16 have different standards for smaller facilities  
17 under certain circumstances. And so in other  
18 words, just, you know, tee it up and give it  
19 back to PHMSA. Because I don't think we're  
20 even going to be able to define what's big and  
21 small, what's in an HCA, what's in a rural  
22 area. And so, you know, we can identify the

1 issue.

2 Erin Murphy?

3 MS. MURPHY: Thanks.

4 Erin Murphy, EDF. Yeah. I think I  
5 may be having a similar line of thinking where  
6 this feels like a lot to sort of parse out on  
7 the fly right now. And looking at the  
8 transmission survey frequencies, you know, it's  
9 generally four times a year in a Class 4  
10 location and two times a year in a Class 1, 2,  
11 or 3 location. So, I mean, that's potentially  
12 reasonable to me as a distinction rather than  
13 trying to create a new distinction of small  
14 versus big facilities, I think, in particular,  
15 because there are smaller peak shaving  
16 facilities. I know there's one in a  
17 disadvantaged community in New York City that  
18 has a lot of community concerns that we've been  
19 hearing about recently. And just thinking  
20 about the locations of those facilities  
21 possibly being, you know, right alongside  
22 communities, it feels preferable to me if the

1 committee was going to recommend any  
2 distinction that it be along those class  
3 location lines.

4 MR. DANNER: Andy Drake?

5 MR. DRAKE: I agree with Erin. I  
6 think we have to be careful in how much sausage  
7 making you want to get into here. I think this  
8 is good guidance here that we have. I think  
9 that someone made a comment that I don't know  
10 if we would need to protect it here, but that  
11 is when you're doing continuous monitoring,  
12 that that would satisfy these requirements;  
13 that you wouldn't have to do them both. But  
14 with that thought, I'm ready to make a motion.

15 MR. DANNER: Well, you have to wait  
16 for Chad to say something.

17 MR. ZAMARIN: Thanks.

18 Chad Zamarin, Williams. Yeah. I  
19 think, Andy, what I'm hearing is the motion  
20 would be different than what's up on the  
21 screen. I'm willing to remove the alternative  
22 considerations for small-scale LNG if we just

1 put something in there that says marry or align  
2 the survey frequency requirements for LNG  
3 facilities with transmission pipeline  
4 facilities. I think that's what I'm hearing  
5 from Erin and Andy.

6 MR. DRAKE: Yeah. That changed.

7 MR. DANNER: Yeah. I am agnostic.  
8 I'm happy with what's up there now. Erin?

9 MS. MURPHY: Erin Murphy, EDF. I  
10 guess if we're turning to this language now to  
11 parse, I think starting with the first bullet.  
12 And I was trying to pull up and go back to how  
13 it's phrased in the proposed rule and have not  
14 successfully pulled it up yet. But I think  
15 rather than phrasing this as an exception,  
16 which I don't think is how it's presented in  
17 the proposed rule, like, supporting PHMSA's  
18 proposal for leak survey and repair standards  
19 at LNG facilities, unless an EPA emissions  
20 standard is in place for that facility or that  
21 portion of that facility, I think I would be  
22 more supportive of that. And then removing the

1 smaller-scale distinction would also be good  
2 and then perhaps adding the recommendation that  
3 PHMSA consider aligning survey frequency with  
4 transmission frequency, question mark?

5 MR. DANNER: So wordsmithing here.  
6 So you would take --

7 MR. ZAMARIN: Can I help on that?

8 MR. DANNER: Would you?

9 MR. ZAMARIN: Yeah.

10 MR. DANNER: Would you? Thank you.

11 MR. ZAMARIN: On that second one, I  
12 think we can just say, PHMSA considers survey  
13 frequencies aligned with what was recommended  
14 by the committee for gas transmission  
15 pipelines. I think that would simplify that  
16 second bullet. So you can strike alternative.  
17 So yep. Frequency, you can strike. PHMSA is  
18 in alignment, yep. I think that's what we're  
19 saying.

20 MR. DANNER: All right. Andy Drake?

21 MR. DRAKE: Erin, I don't know if  
22 they recorded your revisions appropriately.

1 But I think we're very close here. And I think  
2 lining up with the gas transmission rules and  
3 requirements is leveraging. That is very  
4 powerful. So, you know, I would just like to  
5 finalize this. I think any further work on  
6 this starts to get into a lot of sausage making  
7 that rehashes where we've been already.

8 MR. DANNER: Sara?

9 MS. GOSMAN: I'm still trying to get  
10 my head around this. I apologize. But what  
11 I'm worried about here are large export  
12 facilities. I think they should have quarterly  
13 surveys even if they are, you know, not in  
14 Class 4 locations. And so if that's where  
15 we're going with this, I don't feel comfortable  
16 with that.

17 MR. DANNER: So you would prefer  
18 smaller, lower risk language --

19 MS. GOSMAN: Yes, I would.

20 MR. DANNER: -- going back to what  
21 was originally there? All right. Andy?

22 MR. DRAKE: This is Andy Drake,

1 Enbridge. I don't disagree necessarily with  
2 the large export terminals that they could be  
3 on quarter. There are not that many of them.  
4 If people are concerned about that, that can be  
5 a site-specific qualification here. But I  
6 think largely this is what we're talking about.

7 MR. DANNER: Chad?

8 MR. ZAMARIN: Thanks.

9 Chad Zamarin, Williams. Just for  
10 the record, I don't know that it needs to be on  
11 the slide language, but I'm interested if  
12 anybody thinks differently. But I did  
13 appreciate the comment that one of the public  
14 commenters made about continuous monitoring  
15 systems and that those should be qualified as  
16 meeting the survey requirements, whatever the  
17 frequency may be. I do think that that's an  
18 important clarification that I would hope  
19 there's general support for. Yeah. I don't  
20 think we need to add it to the language. But I  
21 thought that was an important comment that we  
22 got. Unless anyone disagreed with that

1 comment, I thought it was important to raise it  
2 and reinforce it. Thanks.

3 MR. DANNER: Okay.

4 Arvind, and then Diane.

5 MR. RAVIKUMAR: Arvind Ravikumar,  
6 University of Texas. There was some discussion  
7 on the slide deck about the type of  
8 technologies and detection thresholds and the  
9 ppm level for service. I want to make a couple  
10 of points in that context because it's related  
11 to Chad's comment as well. Now, outside of the  
12 operators themselves, I'm probably the only one  
13 in the room who has actually done methane  
14 emissions measurements at LNG terminals.

15 So a couple of things that are  
16 important to note, as one of the public  
17 commenters said, LNG terminals are very complex  
18 facilities. These are often 4 to 10 stories  
19 high. And the 5 ppm threshold is not a  
20 practical threshold because in most cases where  
21 you have these methane emissions, you can  
22 actually get to the source of the emission with

1 a wand or whatever device that measures the 5  
2 ppm because LNG tanks, the standard size of  
3 tanks are 100 feet high. You can't get on top  
4 of it.

5 The loading arms for LNG that goes  
6 onto a ship are near the ocean site. And you  
7 can't get with a wand there with 5 ppm. The  
8 liquefaction trains are 7, 8 stories high. And  
9 you can't get to every single equipment with a  
10 wand that measures 5 ppm. So the 5 ppm is not  
11 a problem, but getting that added liquefaction  
12 terminal is going to be that much harder, which  
13 is why the alternative technologies with the 10  
14 kilogram per hour standard are much better  
15 because you can do aerial surveys on  
16 liquefaction terminals. That's my first point.

17 My second point was the continuous  
18 monitoring systems are challenging. I haven't  
19 seen any public data that they work at  
20 liquefaction terminals. We have done a lot of  
21 testing, and data are publicly available on  
22 using continuous monitoring systems at

1 production facilities, midstream compressor  
2 stations. It's very challenging at midstream  
3 compressor stations, even for a smaller site  
4 just because attribution of any methane signal  
5 from a continuous sensor is very challenging at  
6 a complex site.

7 If you do fenceline monitoring of  
8 methane with continuous sensors, it's going to  
9 tell you there's methane. But I don't need a  
10 sensor to tell me that. I know there's  
11 methane. The real challenge is to know where  
12 the methane is coming from. And I haven't seen  
13 any data that says continuous monitoring  
14 systems actually work at complex facilities.  
15 In fact, we know from evidence at midstream  
16 facilities that it's challenging even at a  
17 small compressor station, let alone a large  
18 liquefaction plant.

19 MR. DANNER: Okay. So do you have  
20 any suggestions for editing this language here?

21 MR. RAVIKUMAR: No. With this  
22 language, though, there are no amendments here.

1 This is fine.

2 MR. DANNER: Okay. All right.  
3 Diane?

4 MS. BURMAN: Yeah.

5 I just wanted to thank Chad for  
6 raising the continuous monitoring issue because  
7 I do think that that's important. So the other  
8 thing is there was a reference to a New York  
9 City facility. And I do want to sort of make  
10 the point that that's a really important  
11 facility from a reliability perspective and  
12 that the city would experience outages if that  
13 facility was taken out of service. So we're  
14 really focused on the oversight of that and the  
15 importance of that from a safety perspective  
16 but also reliability perspective. Thanks.

17 MR. DANNER: All right. Andy?

18 MR. DRAKE: I would like to propose  
19 a motion.

20 MR. DANNER: Okay.

21 MR. DRAKE: I don't know. You know,  
22 maybe I should ask Sara.

1                   Did you get on the record, Sara, the  
2                   language that you were looking for for large  
3                   export quarterly? Because I think it's on the  
4                   record. And I don't oppose it. And I don't  
5                   know that it needs to be in this motion. It's  
6                   on the record that we would --

7                   MR. DANNER: Yes, Sara. Go ahead.

8                   MS. GOSMAN: So I think the language  
9                   up there right now is fine for me because it  
10                  addresses small-scale facilities. But I am not  
11                  done. So I would like to have language in  
12                  there about repair timelines. So right now  
13                  it's what is in the manual, and I think we need  
14                  specific timelines for repair. And there have  
15                  been different proposals about the length of  
16                  time. Pipeline Safety Trust had recommended  
17                  three months and also immediate repair criteria  
18                  that would follow along with the Grade 1 leaks  
19                  for pipeline facilities. So I can suggest  
20                  language here. So I would say PHMSA consider a  
21                  repair timeline.

22                  MR. DANNER: Go ahead.

1 MS. GOSMAN: Oh, sorry. PHMSA  
2 consider a repair timeline of immediate repairs  
3 for Grade 1 leaks and three months for other  
4 leaks.

5 MR. DANNER: All right. Any  
6 reaction to that specific one?

7 Erin, go ahead.

8 MS. MURPHY: Yeah. Erin Murphy,  
9 EDF. Maybe, I guess clarification is that I'm  
10 looking at the top of this slide and this is --

11 MS. GOSMAN: On leakage surveys?

12 MS. MURPHY: -- all, yeah, leakage  
13 surveys. So I'm just thinking, like, the point  
14 Arvind was raising about the best applicable  
15 technologies, if the committee wants to make a  
16 recommendation on that, it seems like we might  
17 want to add that in here as well, unless we  
18 want to discuss it separately. Otherwise,  
19 we're just supporting the proposed standard,  
20 which is just the 5 ppm standard is what PHMSA  
21 put forward. So I don't know.

22 I mean, I don't know a lot about LNG

1 facilities. So I'm listening to Arvind's  
2 experience and thinking about the 10 kilogram  
3 per hour standard, which I guess is also, you  
4 know, consistent with the idea of considering  
5 frequency aligned with transmission lines. So  
6 at this point, I mean, until there's more data,  
7 that seems like an appropriate recommendation.

8 MR. DANNER: Does bullet 2 capture  
9 that already, or is that something that we  
10 would need to state separately?

11 MS. MURPHY: I --

12 MR. DANNER: Sure. Yeah. Go ahead.

13 MS. MURPHY: So I would suggest  
14 adding a bullet. So I'm looking at the top.  
15 It says, you know, the proposed rule regarding  
16 leakage surveys for LNG is technically  
17 feasible. And everything else, if the  
18 following changes are made, adding a bullet to  
19 apply technology standard of 10 kilograms per  
20 hour.

21 MR. DANNER: Chad?

22 MR. ZAMARIN: Thanks.

1 Chad Zamarin, Williams. Yeah. I  
2 support that. I think that makes sense and is  
3 consistent with what we did in the last go-  
4 round. I do have an issue.

5 Sara, I understand the concern. But  
6 I think we have to be very careful when we're  
7 talking about large-scale liquefaction  
8 facilities and dictating repair timelines and  
9 how that might impact facility operations. We  
10 had this discussion in the last, and I don't  
11 remember where we ended up on all the different  
12 kind of repair timelines. But the need to be  
13 able to schedule repairs, especially on complex  
14 operating facilities is really important. And  
15 having something tailored to the level of  
16 emissions and risk associated with the repair I  
17 think is necessary. I don't know if we have to  
18 get specific here. But I think putting, you  
19 know, immediate and three months out there on  
20 complex, large processing facilities like LNG  
21 facilities is problematic.

22 MR. DANNER: Could we say something,

1       like, as soon as possible?

2                   MS. MURPHY:   Yeah.   That's what I  
3       think.

4                   MR. DANNER:     Chad?     I mean, I'm  
5       looking for alternative language.

6                   MR. ZAMARIN:   Yeah.   I don't know  
7       what that --

8                   MR. DANNER:     It's kind of best  
9       efforts.   I mean, you know, hurry it up.

10                  MR. ZAMARIN:   Yeah.   I'm trying to  
11       remember what we had in the repair requirements  
12       last go-round.   Again, I generally like the  
13       idea of synchronizing with the work that we did  
14       last go-round, the 10 kilograms per hour, the  
15       survey frequencies, the repair timelines.   But  
16       yeah.   I think in general, we're trying to do  
17       it as soon as practical.   But what are those  
18       outer limits, I think, are important.

19                  And at least for the record, and I  
20       think PHMSA has some discretion and ability  
21       here, but we do have to factor in the issue of  
22       these types of facilities are not like

1 pipelines. We can oftentimes route gas around  
2 a pipeline, take it out of service, make a  
3 repair. Again, 15 percent of the of the energy  
4 moving through our system today is being  
5 exported by just a handful of facilities. And  
6 so, you know, we have to be careful that we're  
7 not disrupting incredibly massive commerce and  
8 operations.

9 MR. DANNER: All right. Thank you  
10 for that. Arvind?

11 MR. RAVIKUMAR: I do want to second  
12 Chad's point there. U.S. LNG export facilities  
13 are 24/7 operations. There is very little, if  
14 any, redundancy on LNG exports. And I think it  
15 would be appropriate to consider, you know,  
16 what is a practical timeline for repair of  
17 these facilities? I don't know what that  
18 number is. But I think it's a fair point to  
19 consider.

20 MR. DANNER: I mean, so we could  
21 make that third bullet a little more general  
22 and a little less specific, Andy?

1                   MR. DRAKE: Yes. I think there's a  
2 way to solve that. And I think it's really  
3 just as soon as practicable, and tie it to our  
4 maintenance and outage schedules. That's  
5 really what you're trying to get at is  
6 something that's in sync with the rhythm of the  
7 plant. And I think that's not going to be  
8 annual or anything, you know? But you're  
9 trying to coordinate what does as soon as  
10 practicable mean? Give it some context and tie  
11 it to what makes that ebb and flow. And I  
12 think if we can get that in there, I think  
13 that's very reasonable and doable.

14                  MR. DANNER: Okay.

15                  Have you seen the language that's up  
16 there now, Diane?

17                  MS. BURMAN: I'll defer to Erin.

18                  MR. DANNER: Okay. Erin?

19                  MS. MURPHY: Erin, Murphy, EDF. I'm  
20 specifically thinking about the leak repair  
21 timeline piece. And I guess my preference  
22 would be, yeah, consistency with the standard

1 for pipelines, which I think we're at now. And  
2 I wanted to note that as we're talking about  
3 sort of the unique nature of an LNG facility,  
4 there is a process in place in the proposed  
5 rule for operators to seek an extension for the  
6 repair of individual leaks. And this seems  
7 like the type of situation where an operator  
8 could exercise that if, you know, it was going  
9 to jeopardize the function of an LNG facility  
10 in some fundamental way. But knowing that  
11 that, you know, exists in the proposed rule, it  
12 seems appropriate to apply the standard repair  
13 timeline.

14 MR. DANNER: All right. We have  
15 language up there. I don't know if we have  
16 captured everything. Sara?

17 MS. GOSMAN: So I guess I want to  
18 make sure I understand what the standard repair  
19 timeline is that we are applying here.

20 MR. DANNER: Chad?

21 MR. ZAMARIN: Yeah.

22 And again, I think we may be high

1 level and have PHMSA kind of figure it out.  
2 But there was language in the work that we did  
3 at the last meeting that said, for example,  
4 repair a Grade 2 leak as soon as practicable  
5 considering impacts to customers and  
6 environmental concerns but not to exceed one  
7 year. That kind of concept I think that we  
8 already worked through makes a lot of sense.  
9 It's like you described. It's as soon as  
10 practicable taking into consideration customer  
11 impacts, environmental concerns. But there is  
12 an outer limit that was established. So I  
13 think something like that makes sense.

14 MR. DANNER: All right.

15 Let me see if Sayler is capturing  
16 that.

17 MR. PALABRICA: I'm not objecting.

18 MR. DANNER: And, Diane, if you  
19 wanted to --

20 MS. BURMAN: Yeah. So I'm trying to  
21 grapple with this. Just my own sort of sense  
22 of things is that LNG operators really don't

1 want leaks and a lot of oversight. And  
2 continuous monitoring, if it triggers a leak,  
3 then folks would be looking at investigating  
4 and addressing it immediately. But just  
5 keeping in mind when we're talking about as  
6 soon as practicable, there may be technical  
7 reasons why something can't be fixed  
8 immediately. However, folks are looking at  
9 immediate, ASAP solutions to address the  
10 issues. So I just want to make sure that  
11 there's a sensitivity in sort of the practical  
12 realities and looking through that.

13 MR. DANNER: All right. Thanks for  
14 that.

15 All right. I am sorry. I have  
16 totally lost track.

17 So, Brian, you go first.

18 MR. WEISKER: Brian Weisker, Duke  
19 Energy. I'll be real quick. I think for that  
20 last bullet, similar to what we did on  
21 transmission, we're limiting technologies.

22 And I hear what you said, Arvind,

1       depending on where it's at.

2                   But if we could just add in, or 5  
3       ppms so you can still use a handheld for  
4       certain pieces of equipment at your LNG  
5       facility. That would be 10 kilograms per hour  
6       or 5 ppm.

7                   MR. DANNER: All right. Thanks for  
8       that. Sara?

9                   MS. GOSMAN: Yeah.

10                   I think the third bullet point is  
11       fine with me. I think the not to exceed one  
12       year is a very important part of that bullet.  
13       I feel like we do need a maximum time limit and  
14       not have it go back to the operators of the  
15       facility entirely, which is as soon as  
16       practicable. I think that's what we would get  
17       to. But I'm comfortable with that language as  
18       it is now.

19                   MR. DANNER: All right. Chad, and  
20       then Erin.

21                   MR. ZAMARIN: Thanks.

22                   Chad Zamarin, Williams. I mean, we

1 are wading into a space that's relatively new,  
2 and we don't necessarily have large LNG  
3 operators here at the table. I do think there  
4 needs to be an understanding that do you think  
5 about how large-scale processing facilities are  
6 scheduled for plan maintenance? I want to hope  
7 that that's annual.

8 But, I mean, to the point that  
9 Arvind made, these are 24/7 operating  
10 facilities. They're frankly very important for  
11 our national security. You know, we tripled  
12 LNG exports into Europe after Russia invaded  
13 Ukraine. And so, you know, had we not been  
14 able to do that, it would've been a much  
15 different situation in Europe over the last 24  
16 months. And so I think it's very important  
17 that we have to take into account PHMSA has to  
18 have the ability or the operator has to have  
19 the ability to demonstrate that it would be  
20 impracticable or not feasible to meet the  
21 requirement. But there would be a scheduled  
22 outage that could be used for the repair.

1 MR. DANNER: Could you do something  
2 as soon as practicable but not to exceed one  
3 year unless approved by PHMSA?

4 MR. ZAMARIN: Yeah. Something like  
5 that, I think, would be appropriate.

6 MR. DANNER: Okay. Yeah.

7 Erin, and then Peter and Sara.

8 MS. MURPHY: Yeah.

9 Erin Murphy, EDF. So on leak repair  
10 timelines, what is in the proposed rule is  
11 Grade 1 leaks are repaired via immediate and  
12 continuous action. Grade 2 leaks that are on  
13 transmission and Type A gathering in Class 3  
14 and 4 locations or HCAs are to be repaired  
15 within 30 days of detection. And the committee  
16 did take a vote in the fall to recommend a  
17 modification, as folks are discussing.

18 But that's not something I was able  
19 to support in the fall. And it's still not  
20 something I feel comfortable supporting in  
21 terms of that pretty dramatic extension of the  
22 timeline for when a Grade 2 leak would be

1 repaired. So if there was consensus before and  
2 again with other committee members, understood.  
3 But I want to note that that's a pretty  
4 significant extension of a timeline for Grade 2  
5 leaks.

6 MR. DANNER: Thank you. And I share  
7 your concern. I do note as soon as  
8 practicable. I mean, I think it's like if you  
9 can do it, you've got to do it. If you can't  
10 do it, you've got to do it within a year. And  
11 if you need more than a year, then you got to  
12 go to PHMSA. So I understand what you're  
13 saying. That's where I would come down on  
14 this. Peter?

15 MR. CHACE: Pete Chace, NAPS. I  
16 think Chad Zamarin made a good point that I'm  
17 not sure we have industry experts in the LNG  
18 plants at the table. What I do know about them  
19 is I don't think this is like a leak that's in  
20 somebody else's backyard, right? This is a  
21 leak on essentially what is a giant bomb where  
22 somebody works, you know, every day. I

1 personally am satisfied that they'll be  
2 motivated to repair leaks as soon as  
3 practicable. And I would just suggest we use  
4 caution to constraining them by timelines  
5 without really studying the issue and  
6 understanding it.

7 MR. DANNER: So just to be clear,  
8 are you uncomfortable with that second bullet,  
9 or are you --

10 MR. CHACE: A year seems like a long  
11 time to me. But --

12 MR. DANNER: Yeah.

13 MR. CHACE: -- I just believe as  
14 soon as practicable. I think the motivation  
15 will be there for the operators to do that.

16 MR. DANNER: Well, yeah. In our  
17 state, I mean, our large LNG facility is on the  
18 waterfront in downtown Tacoma. You know, it is  
19 right in the center of things. And I have to  
20 believe that the operator is going to be  
21 motivated to make the repairs. But I share  
22 your concern. I absolutely do. Sara?

1 MS. GOSMAN: So I think for all of  
2 these bullet points, we are asking PHMSA to  
3 consider certain repair timelines. And I think  
4 part of what that entails is for PHMSA to go  
5 back and look and see if this is, in fact,  
6 practicable. So I assume that with everything  
7 that we're putting up on the slides. I also  
8 was trying to find in the proposed rule, I  
9 think that there is a provision that allows for  
10 an extended timeline for repair if it's not  
11 practicable to do so. I wasn't sure. I  
12 couldn't find it. It's a very long regulation.

13 But I think one part I see here is  
14 for Grade 2 leaks, it says, if a repair cannot  
15 be completed due to permitting requirements or  
16 parts availability, operator must take  
17 continuous action to monitor and repair the  
18 leak. If that's already part of the process, I  
19 wonder if we want to use that language instead  
20 to be again consistent with the rule. I'm fine  
21 with the notification process as well. I'm  
22 just noting that that seems to be built into

1 the repair criteria.

2 MR. DANNER: All right. Thank you.  
3 Sayler?

4 MR. PALABRICA: So just to clarify,  
5 this is based on the recommendations from the  
6 last meeting. So that was in the proposed  
7 rule. For the LNG proposal, we didn't propose  
8 grading criteria. And the repair requirement  
9 was in accordance with the operators'  
10 procedures. So we didn't have a notification  
11 built into the Part 193 Amendment. The  
12 committee recommendation was to extend the  
13 notification program that we proposed for Grade  
14 3 leaks when the Grade 3 repair timeline was  
15 impracticable to Grade 2 leaks as well. So  
16 that's what this is showing.

17 MR. DANNER: All right. Andy Drake?

18 MR. DRAKE: Andy Drake with  
19 Enbridge. I would like to make a motion on  
20 this. I think we've had good conversation.

21 MR. DANNER: Do it now. There are  
22 no other cards up, okay?

1 MR. DRAKE: I kind of was waiting to  
2 see if there was a lull in the conversation.  
3 But it's good conversation. All good record.  
4 And we made some good additions here.

5  
6 But I think the proposed rule as  
7 published in the Federal Register and supported  
8 by the Preliminary Regulatory Impact Analysis  
9 and Draft Environmental Assessment regarding  
10 leaks surveys for liquefied natural gas is  
11 technically feasible, reasonable, cost-  
12 effective, and practicable if the follow  
13 changes are made: One, PHMSA a consider an  
14 exemption from LDAR for portions of facilities  
15 covered by EPA admissions monitoring  
16 requirements or equivalent state programs  
17 similar to what was proposed for gas  
18 transmission pipelines; two, for small-scale  
19 facilities, PHMSA consider survey frequencies  
20 aligned with what was recommended by the  
21 committee for gas transmission pipelines;  
22 three, PHMSA consider repair timelines

1 consistent with the recommendations of the GPAC  
2 applicable to the gas transmission lines with  
3 the following notes: One, Grade 1, immediate  
4 and continuous action; two, Grade 2 as soon as  
5 practicable but not to exceed one year unless  
6 an extension of leak repair is approved  
7 following notifications to PHMSA and applicable  
8 state authority; and fourth bullet point, PHMSA  
9 apply a detection limit consistent with what  
10 the GPAC recommended for gas transmission  
11 pipelines.

12 MR. DANNER: Thank you.

13 Is there a second? Okay. Sara  
14 Gosman seconds.

15 Cameron, let's take a vote.

16 MS. GOSMAN: No. No. I'm sorry.

17 MR. DANNER: Oh. Oh. Oh.

18 MS. GOSMAN: I do not second.

19 MR. DANNER: You do not second. All  
20 right.

21 MS. GOSMAN: Andy, you moved too  
22 fast for me. I was reading through everything

1 again. And I'm concerned about the exception  
2 language. And I don't think this is a big  
3 switch here. But I do feel like it's  
4 important.

5 I talked before about this idea of a  
6 baseline, and backstop, we've been using  
7 different terms here. And I think to me, that  
8 is different than an exception. So I'm trying  
9 to do it off the top of my head. I'm sorry.  
10 Give me a moment.

11 MR. DANNER: You got it. All right.  
12 Sara?

13 MS. GOSMAN: All right. So how  
14 about this? PHMSA consider LDAR requirements  
15 as a backstop for portions of facilities  
16 covered by EPA admissions monitoring  
17 requirements or EPA state programs. I'm sorry.

18 MR. DANNER: Yeah. I think there's  
19 some commas in there.

20 MS. GOSMAN: Hold on. Would you  
21 like me to suggest my backstop language again?

22 MR. DANNER: Yes.

1 MS. GOSMAN: Okay. All right.  
2 Yeah. Thank you. So can we take out the, to  
3 an exception from LDAR? Okay. Thank you.

4 MR. DANNER: All right. So we have  
5 a motion on the table that Andy put forward.  
6 Unless Andy accepts these changes as a friendly  
7 amendment, I have to proceed to see if there's  
8 a second on the first one. And then we would  
9 vote on it.

10 Are you okay with this rewritten  
11 language?

12 MR. DRAKE: So I think it's  
13 appropriate to ask the Committee if they have  
14 comments on this, not just me.

15 MR. DANNER: Well, yeah. But you  
16 put the motion forward. And so we have to go  
17 forward if you object personally. So I have to  
18 ask you first.

19 But before he answers, I will ask if  
20 anyone else on the committee has comments.  
21 Chad?

22 MR. ZAMARIN: Yeah.

1 Chad Zamarin, Williams. Yeah. I'm  
2 worried that we're going to now get into the do  
3 loop again because I'm not sure I understand  
4 what that means. Like, I hope that the  
5 principle that we were discussing, we were  
6 getting consensus on, that let's not have  
7 overlapping jurisdictions between EPA and  
8 PHMSA. And I thought that the language that we  
9 had up there and the conversation and context  
10 around it made it clear that if you have a  
11 program that is equivalent at the state level  
12 or is covered under the EPA requirements.

13 And recall, we voted, I think, on  
14 the concept that Quad 0 and PHMSA should be  
15 aligned and not overlapping. And so I don't  
16 know what a backstop means. It kind of sounds  
17 to me like that means redundant, overlapping  
18 regulatory frameworks. And so I think we're  
19 moving in the wrong direction. I was happy to  
20 second Andy's proposal. But I will hold.

21 MR. DANNER: All right. Well, hang  
22 on just a second.

1 Sara, and then Erin.

2 MS. GOSMAN: Yeah. So I think we're  
3 there, which is why I feel like this is a  
4 friendly amendment. That is, we're concerned  
5 about overlap. We don't want two systems to be  
6 regulating the same thing. But exception means  
7 something, right? And exception means that  
8 we're deciding that the federal government,  
9 PHMSA here, is not regulating in a particular  
10 area.

11 And I think just from a federalism  
12 point of view, you know, I believe it's  
13 important for PHMSA to have the requirements  
14 that it does. Where there's overlap, it can  
15 make, you know, the determination that those  
16 requirements are going to apply. But I don't  
17 want to take that out of PHMSA's hands and sort  
18 of accept out parts here of the regulatory  
19 framework, if that makes sense. So I think  
20 overlap is a fine term to use, EPA consider,  
21 right, the overlap in LDAR requirements.  
22 That's fine. But exception to me means

1 something very different.

2 MR. DANNER: Chad?

3 MR. ZAMARIN: Thanks.

4 Chad Zamarin, Williams. Yeah, I  
5 think we are moving backwards. I mean, the  
6 whole concept and we, I thought, had alignment  
7 on this last meeting is to not have overlap,  
8 not have an operator have to track two  
9 different sets of rules on the same facilities.  
10 There are EPA-covered facilities and there are  
11 PHMSA-covered facilities, and those should not  
12 overlap. I mean, that was a principle that we  
13 actually voted on in the last meeting, I  
14 believe, and there was consensus on.

15 And so we've been trying to avoid  
16 not having the potential for parallel or  
17 overlapping regulatory frameworks to be in  
18 conflict for operators to try to figure out and  
19 track two different systems. Having this kind  
20 of marriage of jurisdictional authority is  
21 important, and not having overlap is also  
22 important to create, I think, clarity.

1 MR. DANNER: Yeah. I also read this  
2 as saying, well, if you're covered by EPA, if  
3 you're covered by a robust state program, then  
4 we don't need the LDAR here. So --

5 MR. ZAMARIN: Correct.

6 MR. DANNER: -- it kind of is an  
7 exception. Erin?

8 MS. MURPHY: Erin Murphy, EDF.  
9 Apologies if I am building the plane as I fly  
10 it. I wanted to make sure I referenced the  
11 language that's in PHMSA's NPRM regarding  
12 compressor stations and how that's framed  
13 because the exception language, I think, for me  
14 similar to what Sara was saying, felt like it  
15 was a step further. And I just wanted to make  
16 sure we were really intentional with the  
17 language. So I would like to propose some  
18 alternate language, which would be, I guess, as  
19 a replacement to the first bullet, that  
20 compliance is not required for any portions of  
21 an LNG facility that are subject to comparable  
22 EPA emissions monitoring requirements,

1 including an EPA-approved state plan or federal  
2 plan.

3 MR. DANNER: I see nodding on that  
4 side. Stop.

5 Sayler, did you capture that? No.  
6 The word exception did not appear in the  
7 language that Erin proposed.

8 MS. MURPHY: Can I restate?

9 MR. DANNER: Yes.

10 MS. MURPHY: So my proposal would be  
11 to remove the first bullet. Oh, I see. So  
12 they're adding it under the second bullet. But  
13 I would want to see the first --

14 MR. DANNER: Oh, I see.

15 MS. MURPHY: -- bullet that's  
16 currently there, removed. And then what would  
17 be added would be maybe the third bullet that  
18 they've put in. Yeah. Thank you. Compliance  
19 with leakage surveys is not required for any  
20 portions of an LNG facility that are subject to  
21 EPA emissions monitoring requirements. I would  
22 say, including an EPA approved state plan or a

1 federal plan.

2 MR. DANNER: All right.

3 This is a friendly amendment to Andy  
4 Drake's motion, so he will have to say yes or  
5 no. Otherwise, we pursue it. Chad?

6 MR. ZAMARIN: Yeah.

7 Chad, Zamarin, Williams. I don't  
8 know the process. I don't know if we can say  
9 EPA approved. I don't know if EPA proactively  
10 approves programs. I don't know, but --

11 MS. MURPHY: Can I direct respond?

12 MR. DANNER: You may.

13 MS. MURPHY: Thanks.

14 So Erin Murphy, EDF. I'm  
15 referencing language that's at 31974 of the  
16 NPRM. And it's the language in the proposed  
17 rule for compressor stations. So the way PHMSA  
18 has proposed it there, which is referencing the  
19 structure of the EPA standards, is that it's  
20 either in the EPA federal regulatory standard  
21 or where EPA has approved a state  
22 implementation plan. If that EPA-approved

1 state implementation plan had leakage survey  
2 standards for parts of an LNG facility, then  
3 that part of the facility would not have to  
4 comply with the PHMSA standard.

5 MR. DANNER: Response on this side?

6 All right. Diane?

7 MS. BURMAN: I just have a  
8 clarifying question in the first bullet, not  
9 the one that's crossed out. Compliance with  
10 leakage surveys is not required for any  
11 portions? Is it for portions of? I'm just  
12 trying to make sure we're not going to confuse  
13 people in what we're saying. Is not required  
14 for --

15 MR. DANNER: Those portions.

16 MS. BURMAN: Okay.

17 MR. DANNER: Yeah.

18 MS. BURMAN: Those portions of an  
19 LNG facility that is subject to EPA emissions  
20 monitoring requirements, including an EPA-  
21 approved state plan or federal plan. Because I  
22 guess I'm looking for clarification. By that

1 second portion, are we now going to be  
2 basically setting up where PHMSA has to look to  
3 their EPA-approved plan, or could it be that  
4 they're subject to EPA admissions monitoring  
5 requirements? Like, I just don't want us to  
6 get involved in, they're hearing, oh, that plan  
7 is subject to the EPA. It isn't yet approved.

8 So what's the clarity that we're  
9 looking for?

10 MR. DANNER: Yeah. So does the  
11 state plan have to be approved by EPA is my  
12 question.

13 MS. BURMAN: Yeah. I don't --

14 MR. DANNER: And it just seems --

15 MS. BURMAN: I just worry that --

16 MR. DANNER: Originally what I was  
17 thinking is PHMSA --

18 MS. BURMAN: -- we go down a rabbit  
19 hole.

20 MR. DANNER: -- would determine  
21 whether it's robust enough, and that would be  
22 sufficient.

1 Erin, do you have thoughts in it?

2 MS. BURMAN: Yeah. I guess that's  
3 what I'm trying to get at. I'm just a little  
4 confused. I feel, like, uncertainty into the  
5 process.

6 MR. DANNER: Uh-huh. Erin?

7 MS. MURPHY: Erin Murphy, EDF. So I  
8 am referencing the segment of the proposed rule  
9 on compressor stations and just recommending a  
10 parallel structure here. And in that section,  
11 which is at 31974 of the NPRM, it starts with  
12 40 CFR, Part 60, sub parts quad 0a or quad 0b,  
13 which I was, you know, shortening to say EPA  
14 emissions monitoring requirements or an EPA-  
15 approved state plan or federal plan, which  
16 includes relevant standards, at least as  
17 stringent as EPA's finalized emissions  
18 guidelines in 40 CFR, Part 60, sub part Quad  
19 0c. So that's very wordy, but essentially what  
20 PHMSA has proposed for compressor stations is  
21 that if any of those combination of  
22 requirements are in place for a compressor

1 station, then the PHMSA standard would not  
2 apply. And my recommendation is a comparable  
3 proposal for the LNG facilities.

4 MR. DANNER: All right. Sara, and  
5 then Diane.

6 MS. BURMAN: Can I just --

7 MR. DANNER: Yeah. Go ahead.

8 MS. BURMAN: -- clarify? So I guess  
9 the thing that I'm getting confused by is I  
10 thought we were all in agreement, and maybe I  
11 misunderstood, that EPA jurisdictional issues  
12 were separate and apart. So if PHMSA  
13 determines that they're under the jurisdiction  
14 of EPA, whether or not EPA approves it or  
15 doesn't approve it, that's for the EPA to deal  
16 with. PHMSA shouldn't have to then start  
17 looking and monitoring the ongoing regulatory  
18 process under the EPA. PHMSA is making a  
19 determination, I would think, on this is under  
20 the EPA jurisdiction. And whether they're  
21 being approved or re-approved, or whatever is  
22 happening, it's the EPA jurisdiction on that.

1 But as to PHMSA, they're just looking and  
2 saying, these portions aren't subject here.

3 I guess I'm just trying to make sure  
4 we don't go through down this now. PHMSA  
5 actually has less oversight of its own safety  
6 because EPA is dictating it. I don't think  
7 that we mean that, and I don't think we're  
8 misaligned in what we're trying to do. I'm  
9 just looking at it from a regulatory process  
10 and diluting PHMSA's own jurisdiction while  
11 trying to understand that we don't want  
12 overlapping jurisdiction.

13 So does that make sense? I don't  
14 know.

15 MR. DANNER: Yeah. I mean, I  
16 understand that you're referencing other  
17 language. I mean, I was looking at this as if  
18 PHMSA finds that a state plan is as robust as  
19 the EPA emissions monitoring requirements, then  
20 that would be sufficient, whether EPA actually  
21 approved the state plan or not. But that is  
22 what I thought we had agreed to on that bullet.

1 And maybe I would ask PHMSA to --

2 MS. MURPHY: May I --

3 MR. DANNER: -- opine if they wanted  
4 to. Erin. Yes.

5 MS. MURPHY: -- direct respond?

6 Thanks.

7 Erin, Murphy, EDF. Apologies if  
8 this is unclear, but I just want to make sure  
9 we all sort of are as close to on the same page  
10 as possible about what is intended here in the  
11 other part of PHMSA's NPRM and what I'm trying  
12 to intend here, which is that under the Clean  
13 Air Act process, you know, EPA is setting  
14 standards. And then there's a process by which  
15 states develop implementation plans for  
16 elements of those standards, or EPA can set a  
17 federal implementation plan. So you have a SIP  
18 or a FIP.

19 And so, like, there is no state  
20 implementation plan in effect, unless it's been  
21 approved by EPA under the Clean Air Act. So  
22 this is not trying to create a process by which

1 PHMSA has to make some evaluation or  
2 determination of its own. It's just, PHMSA can  
3 quickly check, is there a plan in place on the  
4 EPA side? If so, yes, you know, those  
5 standards will apply to this facility. If not,  
6 then, you know, the PHMSA standards will apply.

7 MR. DANNER: Would there ever,  
8 though, be a situation where a state has a plan  
9 that is more robust but is not EPA approved, or  
10 would that never happen?

11 MS. MURPHY: So my understanding of  
12 the Clean Air Act process is that for a state  
13 implementation plan that's implementing EPA  
14 standards that have been adopted, it has to be  
15 approved by EPA. If EPA doesn't approve the  
16 state implementation plan, then it might  
17 instead have a federal implementation plan in  
18 place. So yeah. Well, let me just stop there,  
19 if that's responsive.

20 MR. DANNER: Okay. All right.  
21 Thank you. Sara, you were next?

22 MS. GOSMAN: Yeah.

1                   So just to follow up on Erin's  
2 point, I mean, the way the Clean Air Act works,  
3 you're going to need a state implementation  
4 plan, or the federal government is going to  
5 have a federal implementation plan. So we set  
6 standards, but then we have these state  
7 implementation plans or SIPS. If the states do  
8 not come up with an acceptable SIP, we have  
9 federal implementation plans. So they're  
10 approved, right? You can look them up and see  
11 that these particular state plans or federal  
12 plans are there. So I think it would be a  
13 pretty clear line in terms of when the leakage  
14 surveys would be required or not based on the  
15 structure of the Clean Air Act here.

16                   MR. DANNER: All right. Thank you.  
17 Diane?

18                   MS. BURMAN: Yes.

19                   So I understand, and I don't think  
20 we're in disagreement. I think it's just for  
21 me, the concern in the regulatory overlap,  
22 which we're trying to avoid. And I wonder if

1 we just stop at, compliance with leakage  
2 surveys is not required for those portions of  
3 an LNG facility that are subject to EPA  
4 emissions monitoring requirements, period.

5 I would assume that PHMSA may have  
6 in their sort of looking at it saying, do you  
7 have a plan? Whatever it is, are you in the  
8 process of getting one? Whatever it is to show  
9 that they're under the jurisdiction of the EPA.  
10 And we don't need to limit it here because  
11 that's part of how PHMSA will determine if  
12 they're subject to the EPA admissions  
13 monitoring requirements. And I don't think  
14 that that discounts or dilutes what you are  
15 saying, and I think this is a good, helpful  
16 thing. So I think we're okay.

17 MR. DANNER: Okay.

18 MS. BURMAN: Right?

19 MR. DANNER: Does that meet  
20 everyone's approval? Okay.

21 Andy, you have a motion on the  
22 table. Here is a friendly amendment. Do you

1 accept the friendly amendment?

2 MR. DRAKE: I accept the friendly  
3 amendment as proposed by Erin and Diane.

4 MR. DANNER: And now you have to  
5 read it again.

6 MR. DRAKE: Oh, the whole thing?  
7 Would you like to read it?

8 MS. BURMAN: Yeah. Sorry. This is  
9 my last time, so I'll have to read it.

10 MR. DRAKE: Okay.

11 MS. BURMAN: Okay. The proposed  
12 rule is published in the Federal Register and  
13 as supported by the Preliminary Regulatory  
14 Impact Analysis and Draft Environmental  
15 Assessment regarding leakage surveys for  
16 liquefied natural gas is technically feasible,  
17 reasonable, cost-effective, and practicable if  
18 the following changes are made: Compliance with  
19 leakage surveys is not required for those  
20 portions of an LNG facility that are subject to  
21 EPA emissions monitoring requirements. For  
22 small-scale facilities, PHMSA considers survey

1 frequencies aligned with what was recommended  
2 by the committee for gas transmission  
3 pipelines, PHMSA consider repair timelines  
4 consistent with the recommendations of the GPAC  
5 applicable gas transmission lines. Grade 1,  
6 immediate and continuous action; Grade 2, as  
7 soon as practicable but not to exceed one year  
8 unless an extension of leak repair is approved,  
9 filing notification of PHMSA and applicable  
10 state authority. PHMSA apply detection limit,  
11 consistent with what the GPAC recommended for  
12 gas transmission pipelines.

13 MR. DANNER: Is there a second?  
14 Andy Drake seconds. All right.

15 Cameron, will you take the vote?

16 MR. SATTERTHWAITE: All right.

17 I'll say your name. If you agree  
18 with the language as read, please say, yes. If  
19 not, no.

20 Diane Burman?

21 MS. BURMAN: Yes.

22 MR. SATTERTHWAITE: Peter Chace?

1 MR. CHACE: Yes.  
2 MR. SATTERTHWAITE: David Danner?  
3 MR. DANNER: Yes.  
4 MR. SATTERTHWAITE: Sara Longan?  
5 MS. LONGAN: Yes.  
6 MR. SATTERTHWAITE: Terry Turpin?  
7 MR. TURPIN: Yes.  
8 MR. SATTERTHWAITE: Brian Weisker?  
9 MR. WEISKER: Yes.  
10 MR. SATTERTHWAITE: Andy Drake?  
11 MR. DRAKE: Yes.  
12 MR. SATTERTHWAITE: Steve Squibb?  
13 MR. SQUIBB: Yes.  
14 MR. SATTERTHWAITE: Chad Zamarin?  
15 MR. ZAMARIN: Yes.  
16 MR. SATTERTHWAITE: Chad Gilbert?  
17 MR. GILBERT: Yes.  
18 MR. SATTERTHWAITE: Arvind  
19 Ravikumar?  
20 MR. RAVIKUMAR: Yes.  
21 MR. SATTERTHWAITE: Erin Murphy?  
22 MS. MURPHY: No.

1 MR. SATTERTHWAITE: Sara Gosman?

2 MS. GOSMAN: Yes.

3 MR. SATTERTHWAITE: Sam Ariaratnam?

4 MR. ARIARATNAM: Yes.

5 MR. SATTERTHWAITE: The motion  
6 carries.

7 MR. DANNER: All right. Thank you,  
8 everyone. It is now 5:02. I suggest if you  
9 are willing to do this, that we continue on. I  
10 think we're going to be joined by Mr. Deputy  
11 Administrator.

12 MR. GALE: He might come in later.

13 MR. DANNER: Okay.

14 Would you be willing to go for one  
15 more? Okay. We're on a roll. It's a slow  
16 roll, but it's a roll.

17 So you want to go ahead, John?

18 MR. GALE: Thank you, Chairman.  
19 Yeah.

20 Committee, we have two remaining  
21 issues left on LNG: applicability of leakage  
22 survey requirements to mobile and temporary

1 facilities, and should we apply the proposal to  
2 them? And then finally, the scope of blowdown  
3 boil-off mitigation requirements for LNG  
4 facilities, considering the GPAC's  
5 recommendations for gas transmission line  
6 blowdowns, e.g., recommended exceptions for  
7 smaller volume releases.

8 So if we could, Chairman, I think if  
9 we could complete our work tonight on the  
10 applicability of leakage survey requirements to  
11 mobile and temporary facilities, that would be  
12 outstanding. Thank you.

13 MR. DANNER: All right.

14 Is there a PHMSA staff presentation  
15 on this, or are we just going to go right into  
16 it?

17 MR. GALE: We can go right into it.

18 MR. DANNER: All right.

19 MR. GALE: Yes.

20 MR. DANNER: All right.

21 Anyone want to start the discussion  
22 here on the applicability of leakage survey

1 requirements to mobile and temporary  
2 facilities? All right. Apparently, there are  
3 no issues; is that correct?

4 Brian?

5 MR. WEISKER: Brian Weisker, Duke  
6 Energy. I think if we align with what we just  
7 had on the slide before with small scale, being  
8 aligned with transmission, I think that would  
9 cover what we have as far as mobile and  
10 temporary facilities for small scale.

11 MR. DANNER: So it might be that we  
12 don't even need a recommendation on this one.  
13 Is that what you're saying?

14 MR. WEISKER: I'm fine with that.  
15 Yeah.

16 MR. DANNER: Okay. All right.

17 MR. WEISKER: Go to the next one.

18 MR. DANNER: We really are on a  
19 roll. Let's go to the next one. There. All  
20 right.

21 Scope of blowdown, boil-off  
22 mitigation requirements for LNG facilities,

1 considering the GPAC recommendations for gas  
2 transmission line blowdowns that is recommended  
3 exceptions for smaller volume releases.

4 Anyone want to start the discussion  
5 on this one? Chad?

6 MR. ZAMARIN: Thanks.

7 Chad Zamarin, Williams. The only  
8 thing I want to say here is that we have done a  
9 ton of work on technologies to mitigate  
10 blowdowns of pipelines, and we're referencing  
11 transmission lines here. I mean, most of the  
12 time, the most impactful method involves  
13 recompressing the gas from one pipeline into  
14 another pipeline. I don't know if that's even  
15 practical for LNG facilities.

16 So I don't know how we vote on it.  
17 It feels like it might require additional study  
18 and additional understanding because I don't  
19 think an LNG facility blowdown can be, you  
20 know, compared to how we would mitigate the  
21 emissions from the blowdown of a pipeline  
22 facility. It is just such a different, complex

1 system.

2 MR. DANNER: Erin?

3 MS. MURPHY: Erin Murphy, EDF. I do  
4 want to note, and this is at 31905 in the NPRM,  
5 PHMSA included a series of tables on the  
6 estimated methane emissions. I think this is  
7 based on EPA's Greenhouse Gas Inventory from  
8 LNG storage, import and export terminals, and  
9 blowdowns account for about 80 percent of  
10 estimated methane emissions specifically from  
11 LNG storage facilities. So I just want to make  
12 sure we note that at least on some types of LNG  
13 facilities, blowdowns are a notable emission  
14 source. And I think maybe, you know,  
15 considering that information and the fact that  
16 they are a source of emissions on other LNG  
17 facilities as well, you know, including the  
18 requirement to be mitigating them and exploring  
19 the pathways to mitigate them seems  
20 appropriate.

21 MR. DANNER: Do you have any  
22 thoughts on language for a recommendation along

1           those lines? Is it PHMSA should take steps to  
2           mitigate missions from blowdowns and boil-offs?

3                     And while they're working on that,  
4           Peter, do you have something? No? Okay.

5                     Okay. It looks like they're working  
6           on language. So, Chad, if you want to --

7                     MR. ZAMARIN: Yeah.

8                     Again, I do want to just caution us  
9           and PHMSA. I mean, when we went through this  
10          on pipeline mitigations, I mean, we had  
11          discussions and debates around the use of  
12          flaring. I mean, a flare is the primary, you  
13          know, tool to reduce emissions at a facility,  
14          you know, during a blowdown. So, I mean,  
15          again, like, we're talking about a very  
16          different complex processing liquefaction  
17          facility, and I appreciate Erin's point. And I  
18          believe no doubt it's like on transmission  
19          pipelines.

20                     If we can avoid blowing facilities  
21          down, we can certainly avoid probably the  
22          largest source of methane. But I just think

1 extrapolating transmission technologies and  
2 requirements to LNG facilities is something  
3 that I don't know that we can recommend. But,  
4 I mean, we just spent the last several years  
5 developing best practices in the transmission  
6 pipeline space around minimizing the emissions  
7 from blowdown events. It was an industry-wide  
8 effort. We worked on it for three years, and  
9 we're just now publishing those results. And  
10 that helped us during the discussion about  
11 reducing emissions from blowdowns and  
12 transmission lines. I just don't know how we  
13 do that for an LNG facility when I'm not sure  
14 we're qualified to extrapolate that kind of  
15 information.

16 MR. DANNER: All right. Thank you.

17 Erin Murphy?

18 MS. MURPHY: Thanks.

19 Erin, Murphy, EDF. I think maybe  
20 it's helpful to start with considering what's  
21 in the proposed rule for blowdown mitigation,  
22 since it's been a while since the committee

1 discussed it. And what PHMSA proposed is a  
2 list of five approaches and a requirement that  
3 operators evaluate those approaches and deploy  
4 them to mitigate blowdown emissions or vented  
5 emissions from pipeline facilities, as well as  
6 LNG. There's also an option for operators to  
7 employ alternative approaches that reduces the  
8 volume of released gas by at least 50 percent  
9 compared with taking no mitigative action.

10 EDF and environmental commenters had  
11 a number of recommendations that we talked  
12 about as a committee last time around to  
13 strengthen this. And we think there's a lot of  
14 ways this could be further improved that I  
15 won't reiterate all of them here. But I think  
16 as a starting point, you know, there's a lot of  
17 flexibility in terms of what's in the proposed  
18 rule for blowdown mitigation. And it seems  
19 like that flexibility is, you know, appropriate  
20 in the LNG context where there might not be a  
21 lot of discussion in the record for what is, I  
22 guess, the best sort of pathway to mitigate

1 blowdown emissions. So it seems to me that,  
2 like, applying that standard to LNG facilities  
3 makes sense since there's so much flexibility  
4 in it and then perhaps thinking about, you  
5 know, detailed reporting so that PHMSA and  
6 stakeholders can start to get an understanding  
7 of sort of what's working for these facilities  
8 in particular.

9 MR. DANNER: All right. Thank you.  
10 Chad?

11 MR. ZAMARIN: Thanks.

12 Chad Zamarin, Williams. Yeah.  
13 Again, I don't have any issue with taking this  
14 issue on, but if you read through what is in  
15 the NPRM for transmission lines, it's isolating  
16 the smallest section of pipeline necessary.  
17 We're not talking about pipelines. We're  
18 talking about LNG facilities. It's routing gas  
19 from the pipeline from the nearest isolation  
20 valves or controlled fittings to a flare or  
21 other equipment as fuel gas.

22 And this isn't a pipeline. This is

1 a complex operating facility, reducing pressure  
2 by use of inline compression. Like, that is  
3 taking compression that is on a pipeline or  
4 taking mobile compression out to a pipeline to  
5 recompress gas. That's not applicable to an  
6 LNG facility. Transferring the gas to a  
7 segment of lower pressure pipeline, and it even  
8 says, adjacent to the nearest isolation valves.  
9 That's when we have a pipeline running in  
10 parallel with our pipeline. We can move the  
11 gas from one pipe to the other.

12 It's not applicable to an LNG  
13 facility. Employing an alternative method  
14 demonstrated to result in a release volume  
15 reduction of at least 50 percent compared to  
16 any. These are facilities that have designed  
17 blowdown and emergency shutdown systems. Like,  
18 it's not a pipeline.

19 And so I don't know how we sit here  
20 and we say that we can mandate that LNG  
21 terminals have to create mitigation strategies  
22 to reduce at least 50 percent of the volume

1 during an evacuation event. I think we should  
2 study it. I think we should understand what  
3 the options are. But I just don't think any of  
4 the work we've done on transmission lines,  
5 which is the question that we were asked to  
6 debate, applies to LNG facilities. And I just  
7 think we need to be cautious that more work  
8 needs to be done to understand the potential  
9 methodologies here.

10 MR. DANNER: All right. Thank you.  
11 Erin?

12 MS. MURPHY: Erin Murphy, EDF. I  
13 appreciate that point, but do want to make sure  
14 to draw attention to the fact that in the  
15 proposed rules discussion of the five  
16 approaches for blowdown mitigation, there is  
17 discussion specifically of LNG facilities and  
18 how it might be applicable. I think it's more  
19 for the approaches three, four and five.  
20 There's references to reducing pressure or  
21 reducing LNG volumes in the case of LNG tank  
22 boil-off. The fourth approach references the

1 idea of diverting LNG into adjacent facilities  
2 or a storage vessel rather than venting it.  
3 And the fifth approach references transferring  
4 gas or LNG to a lower pressure pipe segment.  
5 So I just think it's really important to note  
6 that PHMSA considered LNG facilities in its  
7 discussion of these five approaches. So it  
8 seems appropriate to me that they could apply  
9 to LNG facilities.

10 MR. DANNER: I wonder if there's a  
11 way we could acknowledge the difference between  
12 an LNG facility and a pipeline and endorse  
13 what's in the proposed rule, but basically  
14 admonish PHMSA to understand the differences.  
15 And I don't have any wording to provide, but  
16 I'm just wondering if that's an approach that  
17 might bear some fruit.

18 MR. ZAMARIN: Yeah.

19 Chad Zamarin, Williams. May I just  
20 respond, Erin? I don't know if those ideas  
21 were with small-scale liquefaction facilities  
22 that are located along pipelines. But, you

1 know, if you go to a large-scale liquefaction  
2 facility, you're not going to recompress the  
3 gas from a large-scale LNG facility into a  
4 pipeline. I mean, the scale of what we're  
5 talking about is massive, and we don't even  
6 have that ability. I mean, it doesn't work  
7 that way.

8 So again, I read these, and these  
9 are all pipeline strategies that we're working  
10 on, on minimizing the emissions from pipeline  
11 blowdowns. We're lowering the pressure on the  
12 pipe. We're recompressing the gas into  
13 adjacent pipes. We're trying to figure out if  
14 we can bring out, you know, mobile storage, if  
15 necessary. But those are pipeline strategies.  
16 I just want to be clear. Those are not LNG  
17 terminal blowdown strategies.

18 MR. DANNER: Sara?

19 MS. GOSMAN: Yeah. Thank you.

20 I think that the language up there  
21 implies that PHMSA didn't consider the unique  
22 characteristics of LNG plants. And I don't

1 think there's anything in the record that  
2 necessarily supports that. So we can ask them  
3 to consider, again, the unique characteristics  
4 of LNG plants. But I don't want to imply that  
5 they didn't consider them. I don't think that  
6 seems right from the materials that we've been  
7 given.

8 MS. BURMAN: Chair?

9 MR. DANNER: Diane?

10 MS. BURMAN: Is this just a simple,  
11 we need to just wordsmith this? Because I  
12 think if we look at it, we're asking them to  
13 consider addressing emissions from blowdowns  
14 and boil-off, taking into consideration the  
15 unique characteristics of the LNG plants.

16 MR. DANNER: Right. I don't think  
17 there's disagreement there, other than --

18 MS. BURMAN: Just --

19 MR. DANNER: -- they already have  
20 considered the unique characteristics of LNG  
21 plants. But we've also heard that in some  
22 cases, maybe not.

1 MR. ZAMARIN: Yeah. Chad Zamarin,  
2 Williams.

3 And, Sara, I would love to hear from  
4 PHMSA or anyone how you can use one of those  
5 methods at a large-scale liquefaction facility  
6 and achieve a 50 percent reduction at any of  
7 the large-scale liquefaction facilities  
8 operating today. And I'm pretty confident that  
9 there will be no one that can articulate that,  
10 but I would be happy to have that discussion.  
11 I'm raising it because I don't believe that you  
12 can do that. And I think mandating that for  
13 LNG facilities would be a terrible mistake. If  
14 PHMSA can prove otherwise, I would be happy to.  
15 But we deliver to every large-scale  
16 liquefaction facility in the United States, and  
17 you can't recompress the gas in the facility  
18 back into our pipeline. They're not designed  
19 that way. These are techniques that we're  
20 using on mainline pipelines, not at LNG  
21 facilities.

22 MR. DANNER: So I think that we have

1 developed a pretty strong record of what the  
2 discussion is here. I think that the language  
3 in front of us basically says, yeah, PHMSA  
4 should address that they need to consider the  
5 unique characteristics. The conversation has  
6 focused on some specific areas where perhaps  
7 what they have suggested does not fit with an  
8 LNG plant compared to a pipeline. So I think  
9 PHMSA has the view of the Committee here, and  
10 it might be captured there. I just wonder if  
11 anyone agrees with me on that.

12 Diane?

13 MS. BURMAN: Yeah. I do think that  
14 there's obviously a difference of opinion on  
15 the specifics, on the technicalities. But  
16 here, I think this gets at both issues. So I  
17 think this language is sufficient, and I think  
18 the record supports PHMSA looking at this.

19 MR. DANNER: Right.

20 MS. BURMAN: I mean, I think, for  
21 me, it's just making sure that everyone is sort  
22 of on the same page. There is clearly, you

1 know, a technical issue that we need to  
2 address.

3 MR. DANNER: That's correct. Alan?

4 MR. MAYBERRY: You asked the  
5 question. I think we have what we need, and,  
6 you know, separately, we do have another  
7 rulemaking related to LNG. But, you know, we  
8 understand these systems and the differences  
9 thereof. So we've heard the comments, the  
10 input. We appreciate it. And I think we have  
11 what we need to go from here.

12 MR. DANNER: Okay. And the specific  
13 examples that have been raised --

14 MR. MAYBERRY: There's some good  
15 examples.

16 MR. DANNER: Yeah. All right.  
17 Sara, and then Andy.

18 MS. GOSMAN: So maybe that's the  
19 response, but I was wondering if there was any  
20 other response PHMSA wanted to make to the  
21 points that have been raised today --

22 MR. DANNER: PHMSA, are there any

1 other points that you would like to make?

2 MS. GOSMAN: -- in terms of  
3 considering these issues that the committee is  
4 now raising.

5 MR. MAYBERRY: Well, I think when  
6 you look at the way it's worded up there,  
7 unique characteristics, I mean, certainly  
8 taking into account the design and operating  
9 parameters of LNG plants, facilities, versus  
10 pipelines, I think we understand those  
11 differences. And we can account for, you know,  
12 the example Chad brought up related to, say,  
13 transferring pressure from, say, the piping  
14 within an LNG facility somewhere to a pipeline  
15 and the limitations that you have at a  
16 facility. I think we can consider those types  
17 of parameters as we develop requirements for a  
18 final rule for this.

19 MR. DANNER: All right. Thank you.  
20 Andy?

21 MR. DRAKE: Andy Drake, Enbridge. I  
22 think the language is pretty reasonable. The

1           only thing I would offer is some context to the  
2           word address. Address is not a mandate, a  
3           requirement to do something. But the address  
4           part is defined practicable and effective  
5           practices to do this that considered those  
6           things. That's what this whole argument is  
7           about.

8                       MR. DANNER:     So give me those  
9           adjectives again.

10                   MR. DRAKE: It is to study effective  
11           practices and practical approaches for  
12           blowdowns and boil-offs to lower emissions  
13           while considering the unique characteristics of  
14           LNG. It is not pass a mandate to do it. It is  
15           to figure out what do those best practices look  
16           like? It is a maturity issue. And we're not  
17           at the place where you can require to do  
18           something before you understand the  
19           practicability of it. And that's how I  
20           interpret the way that's written. So if that's  
21           not how you interpret it, we should pause  
22           because --

1 MR. DANNER: Sorry. It's my age.  
2 My memory is shot. You said study practicable  
3 and --

4 MR. DRAKE: I think we can say  
5 study. We can say define.

6 MR. DANNER: Or identify?

7 MR. DRAKE: Identify practicable,  
8 effective means to do blowdowns and boil-off  
9 management that consider the specifics of LNG.  
10 We don't need to change the motion, and I'm not  
11 getting into that. But that's what we're  
12 trying to give you is context, right? It's not  
13 go out there and try to figure out how to force  
14 the gas transmission practices into the LNG.  
15 No. It's to look at this and see what of those  
16 practices work in this environment. Because  
17 they don't.

18 And I agree with Chad. This is not  
19 trivial, but how we manage boil-off in an LNG  
20 facility is not anything to do with what we're  
21 doing on recompression on a pipeline. Totally  
22 different animal. And we need to understand

1           that and figure out practices that are  
2           appropriate to do that. So you don't have to  
3           change the motion. I'm just giving you  
4           context.

5                       MR. DANNER: All right. Yeah. I'm  
6           a little nervous just saying study and identify  
7           when, you know, where they have looked at the  
8           unique characteristics of LNG, they also have  
9           some things that they're proposing that would  
10          address them. So I'm hoping that there would  
11          be some middle ground to that context as well.

12                     Erin Murphy?

13                     MS. MURPHY: Yeah.

14                     Erin Murphy, EDF. I do think, you  
15          know, recognizing that PHMSA is going to be  
16          developing and undergoing a rulemaking that's  
17          focused specifically on LNG facilities, you  
18          know, I'm hearing what Andy is saying, and that  
19          will hopefully be an opportunity for the agency  
20          to develop more specific recommendations. I  
21          think my perspective for the near term is that  
22          it's better to have, you know, the facilities

1 making some attempt at methane mitigation under  
2 what I view as a pretty flexible standard  
3 that's in the proposed rule, rather than doing  
4 nothing until another rulemaking takes place.

5 MR. DANNER: All right.

6 Terry Turpin?

7 MR. TURPIN: Terry Turpin, FERC.  
8 I've once again gotten confused as to what  
9 we're talking about because I think we might be  
10 having two different conversations. One seems  
11 to be a conversation about should PHMSA try to  
12 apply the techniques developed for transmission  
13 operators for blowdown and compressor stations  
14 to LNG facilities. And I would agree. The  
15 answer is probably no, it doesn't fit. But  
16 that's not what's in the rule.

17 What's in the rule is something that  
18 PHMSA did tailor, as I read them, and I do have  
19 some familiarity to LNG facilities. It's not  
20 the put it from one pipe to another. They're  
21 talking about looking at smaller segments of  
22 the plants and figuring out how you could move

1 gas around. I mean, it seems like they've done  
2 exactly what we're trying to talk about here.  
3 So I don't understand the conversation at this  
4 point.

5 MR. DANNER: Well, thank you. I  
6 think that the important thing for me is that  
7 PHMSA consider the unique characteristics of  
8 LNG plants. And, you know, I'm comfortable  
9 with this language. I'm also comfortable with,  
10 you know, the context that Andy has given to  
11 it. And I also think we've had a pretty good  
12 conversation here so that PHMSA has direction.  
13 So unless there's any further conversation --

14 MS. BURMAN: And I do think, for the  
15 record, there is a recognition around the table  
16 that there is another rulemaking that --

17 MR. DANNER: Yes.

18 MS. BURMAN: -- could address some  
19 of this.

20 MR. DANNER: Yeah, I think there is  
21 that recognition.

22 MS. BURMAN: Right.

1 MR. DANNER: Sara?

2 MS. GOSMAN: I just want to ask a  
3 clarifying question about the language up  
4 there. So PHMSA has addressed emissions from  
5 blowdowns and boil-off and will presumably do  
6 so in the final rule. I'm just wanting a  
7 clarification about what addressing emissions  
8 means here. I think what you're saying is that  
9 you want PHMSA to continue considering the  
10 unique characteristics of LNG plants in  
11 addressing emissions from blowdowns and boil-  
12 off.

13 MR. DANNER: I don't see any further  
14 comments on that. This is, I think,  
15 appropriately not specific language with  
16 specific actions that PHMSA should take. And I  
17 think we should leave it general so that they  
18 can, as the expert agency, determine of what is  
19 appropriate, having heard our concerns.

20 All right. The language just  
21 changed. So we have a different motion in  
22 front of us?

1 PARTICIPANT: It's really saying the  
2 same thing.

3 MR. DANNER: All right.

4 PARTICIPANT: It addresses Member  
5 Gosman's concern.

6 MR. DANNER: Okay. We have language  
7 before us now.

8 Is there anyone willing to make a  
9 motion? Sara Longan?

10 MS. LONGAN: Sara Longan, Army Corps  
11 of Engineers. As I move, the proposed rule as  
12 published in the Federal Register and as  
13 supported by the Preliminary Regulatory Impact  
14 Analysis and Draft Environmental Assessment  
15 regarding blowdown and boil-off mitigation is  
16 technically feasible, reasonable, cost-  
17 effective, and practicable if the following  
18 changes are made: PHMSA considers the unique  
19 characteristics of LNG plants.

20 MR. DANNER: All right. Thank you.

21 Is there a second? Terry Turpin  
22 seconds.

1 All right. Cameron, will you take  
2 the vote?

3 Oh. I'm sorry?

4 MS. BURMAN: I don't mean to throw a  
5 monkey wrench here, but PHMSA considers the  
6 unique characteristics of LNG plants for what?  
7 Like, I felt like we were there, and now I'm  
8 worried that this locks us into the rule  
9 itself. And that's not at all what the  
10 discussion was.

11 MR. DANNER: Well, yeah. The  
12 language that had address on it was --

13 MS. BURMAN: I guess this is the  
14 issue, right? There's a threshold issue of the  
15 feasibility of this. And there's disagreement,  
16 strongly from the folks who have more technical  
17 knowledge. So I don't know. I'm just confused  
18 before we take this vote. I can't vote on this  
19 one. I'm not really sure what it is that I'm  
20 voting on.

21 MR. DANNER: Right. Well, we have  
22 the motion, and it has been seconded. Before

1 we take the vote, I will take comments.

2 So, Sara?

3 MS. GOSMAN: Yeah.

4 Just in response, I mean, I think  
5 the preamble there tells us what we're talking  
6 about, which is blowdown and boil-off  
7 mitigation.

8 MR. DANNER: Okay. Chad?

9 MR. ZAMARIN: Yeah.

10 Chad Zamarin, Williams. Yeah, I  
11 think that's where I'm running into a problem.  
12 I think this is so high level, and maybe the  
13 record is enough.

14 And, Terry, I hear you, but these  
15 sections were basically mirrored off of the  
16 transmission requirements. And there is a  
17 requirement in here. If voting yes on this  
18 implies that there's support for requiring that  
19 an LNG facility has to achieve a 50 percent  
20 reduction in emissions during a blowdown  
21 operation, which is what it says, that was  
22 language that we, you know, lifted from the

1 transmission where we have techniques that  
2 we're working on in order to mitigate and  
3 minimize. And we were, I think smart enough on  
4 those kinds of pipes to say, okay, we're not  
5 there today, but we're going to go for 50  
6 percent reduction.

7 I cannot support the language that's  
8 in here. I don't believe that it was tailored  
9 to the unique challenges of a large-scale  
10 liquefaction facility that's designed and built  
11 for a certain type of blowdown operation. And  
12 so I'm struggling with being able to vote for  
13 this. But maybe the record is enough to say  
14 that I just think you got to make sure you're  
15 really careful in tailoring these requirements  
16 to what is achievable, practicable for every  
17 kind of complexity that you're going to  
18 encounter at an LNG facility.

19 MR. DANNER: So when the address  
20 language was up there before, what I took it to  
21 mean is that PHMSA will go back and look at  
22 what they've done to sort of look at the things

1           that might not be applicable to an LNG plant  
2           that would be applicable to a pipeline. And  
3           then they would consider what kind of  
4           amendments would be necessary to their proposed  
5           rule. So I think that this language may change  
6           that a little bit, but I think that that was  
7           the intent. So we have a different motion  
8           before us now, but I think what I'm hearing  
9           from PHMSA is that it was intended to do the  
10          same thing.

11                       Sara, do you have a comment?

12                       MS. LONGAN: Well, Chairman, I did,  
13           and now I'm more confused than anyone else  
14           here. I proposed the motion, and as read, as a  
15           collective consideration of the dialogue, I  
16           interpreted the motion, the words on the slide  
17           before me and the one that I made, to align  
18           with everything that you said right until the  
19           end when you said, and then PHMSA might do  
20           something different. I think we remove the  
21           specificity and highlight that there are unique  
22           characteristics of LNG, the specificity at one

1 example, to 50 percent, so that PHMSA is taking  
2 our advice and the dialogue and the discussion  
3 of this counsel back to evaluate.

4 MR. DANNER: Okay.

5 MS. LONGAN: That's what I read.

6 And that's the motion I --

7 MR. DANNER: And actually, you and I  
8 are on the same page on that. That is what I  
9 understood as well. Alan?

10 MR. MAYBERRY: I was just going to  
11 offer suggestion here because I think what was  
12 taken out of that bottom bullet was because it  
13 was already in the top. Why not just move the  
14 specifics? Which I think you were driving at  
15 related to, you know, blowdown and boil-off,  
16 just simply move that to the bullet. And  
17 that's, I mean, for you to consider.

18 Does that get to what you were  
19 talking about?

20 MR. DANNER: Diane?

21 MS. BURMAN: And I think if there's  
22 a lack of clarity, Sara's words on the record

1 are totally on point. So if there's anyone who  
2 doesn't remember, just look at the transcript,  
3 Sara's.

4 MR. DANNER: All right. Are we  
5 saying the same thing, whether we have the  
6 first bullet or the second bullet, I guess is  
7 my question? If there is a consensus that we  
8 do, then we can go ahead with the vote on the  
9 motion that Sara has made. Otherwise, we might  
10 request that Sara amend it. Andy?

11 MR. DRAKE: Andy Drake with  
12 Enbridge. I think we're revolving around the  
13 right issues here. But I do think there's  
14 something that, and I don't know how to get  
15 this in the context, but the target of 50  
16 percent is fundamentally very difficult, if  
17 it's even possible. I mean, we're sort of  
18 skating past a lot of the obviousness here,  
19 but, I mean, LNG facilities operate at minus  
20 260 degrees Fahrenheit. It's liquid. It's not  
21 a gas. So taking all the things we do with gas  
22 and to say, we're just going to transplant them

1 over here, and we're going to get a 50 percent  
2 reduction on LNG plants, like, that is wildly  
3 optimistic.

4 So if we can at least consider that  
5 the target of 50 percent is part of that red  
6 piece down there. And I think you're starting  
7 to get something that makes some sort of sense.  
8 They should be looking at some sort of  
9 practical target or some sort of practical  
10 efforts and considering the unique  
11 characteristics of this in setting targets. I  
12 don't even know if we can do this. So I'm sort  
13 of stuck. How do you vote yes? I don't even  
14 know if I can do it.

15 MR. DANNER: So can you vote on the  
16 red or both? Neither of them?

17 MR. DRAKE: I think if it considers  
18 that the target of 50 percent is also a part of  
19 this discussion, then, okay. But I think you  
20 have to consider we're taking in lock, stock,  
21 and barrel what we talked about in gas  
22 transmission, trying to plug it into an LNG

1 facility. It's like, wow.

2 You know, I beg to differ, Terry.  
3 This is largely a cut and paste out of the gas  
4 transmission functionality, and it plugged  
5 right in here. It's the things that we do on  
6 gas transmission, and we're trying to do it in  
7 an LNG plant. And I just think that is not  
8 very --

9 MR. DANNER: All right.

10 Sara, then Chad.

11 MS. GOSMAN: So I want to make sure  
12 that it's clear that the 50 percent is one of  
13 the possible methods. Because I think I may  
14 have heard some sense that it was a  
15 requirement, but I don't read that in the  
16 proposed rules. What I read is that it's one  
17 of the possible methods that can be used here.  
18 I would prefer to stay really broad, which is  
19 why I think I liked the language that was part  
20 of the motion that was made. Sorry.

21 MR. DANNER: So the motion as made  
22 by Sara?

1 MS. GOSMAN: As made by Sara.

2 MR. DANNER: All right.

3 MS. GOSMAN: I think another  
4 possibility is to say something like PHMSA  
5 considered the unique characteristics of LNG  
6 facilities in determining allowable mitigation  
7 methods, right, and which gets at the sort of  
8 set of issues that you've been talking about.  
9 But I think we're doing all of the same things.

10 MR. DANNER: All right.

11 Chad, and then Diane.

12 MR. ZAMARIN: Yeah. And maybe we  
13 interpret what we mean by our vote differently  
14 because I think what I'm hearing some think is  
15 that the requirements that are in there are  
16 okay, but go ahead and, you know, make some  
17 tweaks maybe and consider the unique  
18 characteristics. My vote is get rid of those.  
19 They don't make sense for LNG terminals, and  
20 develop criteria that makes sense for LNG  
21 terminals. Like, that's what I'm suggesting.  
22 I mean, these were lifted in large part from

1 the transmission work that was done. And  
2 again, this is like taking a car that has  
3 already been built and then afterwards saying,  
4 oh, that car has 20 miles per gallon, but I  
5 want it to be 40.

6 You know, this is a designed  
7 facility that has designed blowdown and venting  
8 systems and it can't be retrofit or modified  
9 easily and it's not easy on a pipeline, but  
10 it's easier on a pipeline. I mean, this is a  
11 designed kit. Like, this is like a refinery or  
12 a processing facility. It's an LNG  
13 liquefaction terminal. It is designed a  
14 certain way.

15 And I hear you. That's only one of  
16 four, Sara, but these are very specific, and  
17 none of them really speak to anything that's  
18 practical. So you end up at this 50 percent  
19 reduction requirement, which again, I don't  
20 even know that you can do 10 percent. I don't  
21 know how you totally redesign an LNG facility  
22 that is designed a certain way.

1                   And so, again, I'll vote on the  
2 motion, and I would vote yes if the yes is  
3 interpreted to mean I don't agree with what's  
4 in the rule and I would recommend that  
5 something is drafted that considers the unique  
6 characteristics of LNG.

7                   MR. DANNER: All right. Diane?

8                   MS. BURMAN: Yeah.

9                   I mean, this is kind of weird that  
10 we're discussing how we're each interpreting  
11 the vote. I do think that the record that  
12 we're establishing is that you may need to  
13 refine, if not rewrite, this part of the rule.  
14 So to the extent that we are saying you got to  
15 consider this, you got to re-look at this, I  
16 think you have what is needed. I can vote yes  
17 with that. But I do feel like Chad, that it's  
18 important. And, frankly, like Sara, we each  
19 have to explain what we think. So I think  
20 that's important.

21                   And thank you, Sara Longan, for  
22 putting this vote.

1 MR. DANNER: And I'm looking at  
2 this, too, saying, okay, go back over what  
3 you've done and just say, you know, which of  
4 these can apply to an LNG plant? What's  
5 appropriate? What's not? That's what I'm  
6 asking PHMSA to do, and I think that's what  
7 we're all doing here and whether it's the  
8 language in red or the language that Sara has  
9 put in front of us in the motion, which has  
10 been seconded, by the way. So I think we're  
11 kind of getting a sense of what the committee  
12 is looking at.

13 Sara Gosman?

14 MS. GOSMAN: Again, I think we  
15 should just vote on the motion as it was, but,  
16 you know, if we want more specificity, I think  
17 that first bullet point up through, including a  
18 review of the appropriateness of each of the  
19 methods listed in it is fine. I think, you  
20 know, that does what I think the original  
21 language did. I don't know that we need to  
22 call out the one with the 50 percent. It seems

1 to me that that's getting into the weeds too  
2 much, and I don't think that that is what we  
3 should be doing as a committee. I mean, this  
4 is one of the methods, if they'll consider it.

5 MR. DANNER: All right. Brian?

6 MR. WEISKER: Brian Weisker, Duke  
7 Energy. And I'm concurring with the first  
8 bullet because as an operator of four LNG  
9 plants, granted they would be smaller, I don't  
10 think that anything that's listed in there is  
11 even technically feasible. I'm not confident  
12 we could do any of that. So as long as a yes  
13 vote by me aligns with a yes vote, what Chad  
14 was saying, is that it's really going back and  
15 taking a hard look at what is actually  
16 technically feasible to do at these facilities.

17 MR. DANNER: All right.

18 So I am getting a sense of the room  
19 that there is a consensus on that first bullet  
20 or close to a consensus on that first bullet  
21 now.

22 I will need Sara to withdraw her

1 motion and redo it.

2 MS. LONGAN: Mr. Chairman, Sara  
3 Longan, Army Corps of Engineers, withdrawing  
4 first motion. Moving the proposed rule as  
5 published in the Federal Register and as  
6 supported by the Preliminary Regulatory Impact  
7 Analysis and Draft Environmental Assessment  
8 regarding blowdown and boil-off mitigation is  
9 technically feasible, reasonable, cost-  
10 effective, and practicable if the following  
11 changes are made: PHMSA considers the unique  
12 characteristics of LNG plants, including a  
13 review of the appropriateness of each of the  
14 methods listed in sub part 193 2523(a) 1  
15 through 4.

16 MR. DANNER: All right.

17 Is there a second? All right.

18 Arvind seconds.

19 Cameron, we can now take a vote.

20 MR. SATTERTHWAITE: Okay.

21 Say your name. If you agree, say  
22 yes. If not, no.

1 Diane Burman?  
2 MS. BURMAN: Yes.  
3 MR. SATTERTHWAITE: Peter Chace?  
4 MR. CHACE: Yes.  
5 MR. SATTERTHWAITE: David Danner?  
6 MR. DANNER: Yes.  
7 MR. SATTERTHWAITE: Sara Longan?  
8 MS. LONGAN: Yes.  
9 MR. SATTERTHWAITE: Terry Turpin?  
10 MR. TURPIN: Yes.  
11 MR. SATTERTHWAITE: Brian Weisker?  
12 MR. WEISKER: Yes.  
13 MR. SATTERTHWAITE: Andy Drake?  
14 MR. DRAKE: Yes.  
15 MR. SATTERTHWAITE: Steve Squibb?  
16 MR. SQUIBB: Yes.  
17 MR. SATTERTHWAITE: Chad Zamarin?  
18 MR. ZAMARIN: Yes.  
19 MR. SATTERTHWAITE: Chad Gilbert?  
20 MR. GILBERT: Yes.  
21 MR. SATTERTHWAITE: Arvind  
22 Ravikumar?

1 MR. RAVIKUMAR: Yes.

2 MR. SATTERTHWAITE: Erin Murphy?

3 MS. MURPHY: Yes.

4 MR. SATTERTHWAITE: Sara Gosman?

5 MS. GOSMAN: Yes.

6 MR. SATTERTHWAITE: Sam Ariaratnam?

7 MR. ARIARATNAM: Yes.

8 MR. SATTERTHWAITE: It is unanimous.

9 The motion carries.

10 MR. DANNER: All right. Thank you.

11 And that takes us to the end. So we  
12 will pick up tomorrow morning with hydrogen.  
13 And before we close, a matter of personal  
14 privilege. Our colleague, Diane Burman, is  
15 leaving our committee today.

16 This is her last day, and I want to  
17 thank you so much for the work that you've  
18 done. Diane and I go back a long way. We both  
19 served on the board of directors of the  
20 National Association of Regulatory Utility  
21 Commissioners. We were both on the Committee  
22 on International Relations. She is the winner

1 of the Terry Barnich Award for her work on  
2 international work.

3 She has been active in programs that  
4 are promoting women in energy. She has been  
5 active on critical infrastructure. She has  
6 been active in gas infrastructure and other  
7 critical infrastructure. She's a legend among  
8 utility commissioners. And I'm going to miss  
9 you at NARUC meetings, but I'm also going to  
10 miss you at GPAC meetings, and I want to thank  
11 you for all the work that you've done.

12 MS. BURMAN: I just want to take a  
13 moment, and I promise it will only be a moment.  
14 Well, my moment. I've been a public servant  
15 for 28 years, and more than half of that has  
16 been with the commission as a staffer  
17 originally and then coming back as a  
18 commissioner. And when I came back as a  
19 commissioner, it was really important to me  
20 that I try to make a positive difference. I  
21 came in in 2013, and in 2014 was the East  
22 Harlem explosion.

1 I'm a big believer in crisis events  
2 are really important to take stock of and look  
3 about what you can do working collaboratively  
4 to make a difference. And, for me, the window  
5 of opportunity of crisis events is significant,  
6 and the opportunity for continuous improvement  
7 is really critical. And I do feel in New York,  
8 we working with the LDCs and the federal  
9 regulator and stakeholders have made a  
10 difference in really looking at what we can do  
11 to improve pipeline safety. And really, for  
12 me, I think we are all ambassadors in trying to  
13 enhance pipeline safety, also understanding the  
14 need to incorporate environmental  
15 considerations in a way that makes sense.

16 And I decided when I was not seeking  
17 reappointment that the last session that I  
18 wanted at the public service commission was the  
19 March session. And part of that was because it  
20 was the week of the 10-year anniversary of East  
21 Harlem explosion. It was Women's History  
22 Month. And also, I was really focused on

1           trying to be here for the full week. But it's  
2           really significant to me that my last act as a  
3           state regulator is doing the thing that has  
4           given me the most sense of satisfaction and  
5           sense of accomplishment and continuously  
6           working on pipeline safety. So GPAC is really,  
7           you know, where I started and where I'm ending  
8           in really caring and making a positive  
9           difference.

10                   I was also trying to get through so  
11           that April 1st would be the start of Dig Safely  
12           Month. And I just really want to thank all of  
13           you for making me a better regulator and making  
14           me feel really proud to be a part of all that  
15           we're doing. I think that all of us together,  
16           our collective voices make a difference. And I  
17           would like to ask all of you to continue  
18           committing to continuously improving pipeline  
19           safety and working collaboratively to  
20           meaningfully advance pipeline safety because  
21           it's really that important. And thank you so  
22           much.

1 MR. MAYBERRY: Hey, Diane, just very  
2 briefly. Tristan Brown, our deputy  
3 administrator, sends his regards. He was  
4 hoping to be here this afternoon. I kept  
5 trying to give him an idea of when we were  
6 going to end. It was a moving target, but he  
7 had to stay back for a meeting in Washington.  
8 But he does send his regards and thanks you  
9 dearly for your service on the Committee.

10 Just real quickly, you were  
11 appointed way back in June of 2017 to the GPAC,  
12 and you are very unique in a number of  
13 respects. But it's very unique that you're  
14 also a member of the LPAC. You're the only  
15 member who serves on both or has served on both  
16 committees. So thank you for pulling double  
17 duty, and thank you for your thoughtful  
18 approach to pipeline safety and advising us.  
19 And, you know, you've just been great to work  
20 with and we, you know, wish you well as you  
21 move forward in your other pursuits and wish  
22 you luck. Thank you.

1 MR. DANNER: All right. So with  
2 that, we're going to call it a day. We'll be  
3 adjourned until tomorrow morning at 8:30, and  
4 we will take up hydrogen.

5 (Whereupon, the above-entitled  
6 matter went off the record at 5:48 p.m.)  
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17  
18  
19  
20  
21  
22

| A                               |                               |                                 |                               |
|---------------------------------|-------------------------------|---------------------------------|-------------------------------|
| <b>A-team</b> 10:3              | 203:10 205:8 279:7            | <b>addressing</b> 94:12         | <b>afternoon</b> 143:22       |
| <b>a.m.</b> 1:11 3:2 91:21,22   | 349:6 361:19                  | 156:12 223:18 305:4             | 169:18 219:10,17              |
| 114:18,19 256:9                 | <b>acknowledge</b> 132:19     | 348:13 358:7,11                 | 220:4 241:8 246:6             |
| <b>abandoned</b> 171:20         | 207:3 240:10 256:20           | <b>adequacy</b> 277:3           | 251:19 258:20 379:4           |
| <b>abbreviated</b> 32:17        | 257:10 346:11                 | <b>adequate</b> 259:16 274:8    | <b>age</b> 354:1              |
| <b>ability</b> 47:20 69:5 122:5 | <b>acknowledged</b> 5:13      | <b>adhere</b> 6:12              | <b>agencies</b> 15:20 159:1   |
| 148:19 174:10 300:20            | <b>act</b> 3:17 11:22 24:12   | <b>adjacent</b> 58:3 264:16     | <b>agency</b> 22:5 83:14      |
| 307:18,19 347:6                 | 170:8 220:12 223:1            | 272:17 344:8 346:1              | 85:13 93:10,16 94:10          |
| <b>able</b> 46:12 56:11 57:22   | 225:17 231:14 328:13          | 347:13                          | 160:6 164:16,16               |
| 58:4,14 59:22 61:11             | 328:21 329:12 330:2           | <b>adjectives</b> 353:9         | 165:6 171:4 193:19            |
| 68:13 69:17 74:7 75:9           | 330:15 378:2                  | <b>adjourned</b> 380:3          | 195:20 255:20 259:13          |
| 89:6 104:18 108:16              | <b>action</b> 12:1 180:17     | <b>administered</b> 259:12      | 259:14 270:16 355:19          |
| 111:10 125:21 134:12            | 308:12 311:17 314:4           | <b>ADMINISTRATION</b> 1:3       | 358:18                        |
| 152:2,11 153:21                 | 333:6 342:9                   | <b>administrative</b> 206:10    | <b>agency's</b> 25:13         |
| 188:22 195:2 196:21             | <b>actions</b> 194:17 225:1   | <b>administrator</b> 2:6 3:15   | <b>agenda</b> 5:16            |
| 212:22 264:7 273:17             | 358:16                        | 4:2 335:11 379:3                | <b>aggressive</b> 120:3       |
| 275:14 285:20 299:13            | <b>active</b> 263:6 376:3,5,6 | <b>admissions</b> 313:15        | <b>aggressively</b> 120:18    |
| 307:14 308:18 362:12            | <b>activity</b> 132:21        | 315:16 324:4 331:12             | <b>agnostic</b> 288:7         |
| <b>above-entitled</b> 91:20     | <b>actual</b> 52:5 152:4      | <b>admonish</b> 346:14          | <b>ago</b> 10:19 49:11,19     |
| 114:17 144:3 219:6              | 255:12                        | <b>adopt</b> 40:21 131:16       | 78:15 79:19 105:13            |
| 380:5                           | <b>add</b> 44:15 45:8 78:4    | 139:1 141:12,20                 | 181:7 186:16 204:3            |
| <b>above-ground</b> 230:9       | 125:4 138:11 258:17           | 220:15 270:1                    | 257:4 281:4 283:4             |
| <b>absolutely</b> 119:21        | 259:18 271:21 285:14          | <b>adopted</b> 183:14 282:1     | <b>agree</b> 64:13 72:16 73:3 |
| 149:6 188:16 310:22             | 291:20 297:17 306:2           | 329:14                          | 73:4,19 80:6 95:9             |
| <b>absorb</b> 39:19             | <b>added</b> 108:3 237:8      | <b>adopting</b> 184:10 222:15   | 112:5 142:8 168:13            |
| <b>accept</b> 146:5 164:10      | 247:6 293:11 321:17           | <b>adoption</b> 25:22           | 169:6 217:10 257:12           |
| 318:18 332:1,2                  | <b>adding</b> 103:4 106:20    | <b>advance</b> 30:18 31:22      | 275:8 277:7 287:5             |
| <b>acceptable</b> 15:6 124:8    | 247:9 267:9 275:20            | 34:8 35:14,17,22                | 333:17 354:18 356:14          |
| 330:8                           | 289:2 298:14,18               | 378:20                          | 370:3 373:21                  |
| <b>acceptance</b> 154:21        | 321:12                        | <b>advanced</b> 12:5,21         | <b>agreed</b> 156:10 283:3    |
| <b>accepts</b> 267:4 316:6      | <b>addition</b> 6:2 15:19     | 13:13 32:13 37:19               | 327:22                        |
| <b>access</b> 57:22 60:7        | 23:11 158:11 222:17           | 68:20 116:8 249:15              | <b>agreement</b> 61:16        |
| 147:11 158:19,21,22             | <b>additional</b> 18:13 20:19 | 258:5                           | 123:15,20 240:2               |
| 160:12 195:4 196:9              | 25:4 28:12 31:4 34:12         | <b>advances</b> 167:20          | 271:20 326:10                 |
| 196:20 208:21,21                | 43:20 90:14 97:2              | <b>advancing</b> 243:13         | <b>agrees</b> 68:19 242:5     |
| <b>accessible</b> 60:18 89:19   | 108:11 115:15 117:11          | <b>advantage</b> 212:21         | 350:11                        |
| 194:15 240:14                   | 117:14 137:21 172:1           | 213:7                           | <b>ahead</b> 11:12 34:15      |
| <b>accommodate</b> 49:9         | 207:16 224:22 232:22          | <b>advent</b> 248:22            | 88:16 197:11 216:17           |
| 235:5                           | 237:21 244:1,3 280:2          | <b>advice</b> 364:2             | 220:7 265:14 267:8            |
| <b>accompanied</b> 16:5         | 338:17,18                     | <b>advise</b> 198:11            | 296:7,22 297:7                |
| <b>accomplish</b> 77:21         | <b>additionally</b> 7:21 19:5 | <b>advisement</b> 159:10        | 298:12 326:7 335:17           |
| 150:8 155:13,13                 | 23:2,22 24:17,22              | <b>advising</b> 379:18          | 365:8 368:16                  |
| 161:9 168:18 174:18             | 247:2                         | <b>advisory</b> 1:5,10 3:8,16   | <b>ahold</b> 209:3            |
| 190:15 277:6                    | <b>additions</b> 313:4        | 5:18 7:9 169:6 232:10           | <b>air</b> 2:18,20 224:22     |
| <b>accomplished</b> 101:18      | <b>address</b> 24:14 25:1     | <b>advocacy</b> 228:9 231:15    | 241:11,11,13,20,21            |
| <b>accomplishment</b> 378:5     | 50:13 59:3 78:20 94:5         | 233:5,9 235:12 237:3            | 242:1,4,9 243:10,21           |
| <b>account</b> 73:21 74:1       | 97:22 113:4 117:8             | 238:11                          | 244:3 260:17,19               |
| 194:4 244:14 262:10             | 128:15 157:4 181:5            | <b>advocates</b> 147:13         | 261:10 262:5 328:13           |
| 307:17 339:9 352:8              | 190:21 220:16 231:16          | <b>advocating</b> 216:11,12     | 328:21 329:12 330:2           |
| 352:11                          | 235:13 243:16 250:15          | <b>aerial</b> 24:1 30:7,9 31:19 | 330:15                        |
| <b>accounted</b> 285:8          | 256:19 269:13 305:9           | 48:10,10 51:2 56:4              | <b>aircraft</b> 57:11 63:10   |
| <b>accuracy</b> 150:19          | 350:4 351:2 353:2,2,3         | 57:9,13 59:4 63:18              | 152:3                         |
| 158:19 163:17 166:15            | 355:10 357:18 360:12          | 64:13,20 65:17,21               | <b>airplane</b> 63:6 136:5    |
| 175:16 188:14                   | 362:19                        | 66:19 67:10 79:8 97:1           | <b>airplanes</b> 136:6 179:9  |
| <b>achievable</b> 224:11        | <b>addressed</b> 12:10 24:10  | 112:2 133:1 172:18              | <b>al</b> 57:5 132:21 196:4   |
| 362:16                          | 73:11 145:5,6 358:4           | 293:15                          | 223:6,10 226:12               |
| <b>achieve</b> 158:11 199:22    | <b>addresses</b> 103:6        | <b>affirmatively</b> 202:5      | 232:8 237:11                  |
|                                 | 296:10 359:4                  | <b>affirmed</b> 168:16          | <b>Alan</b> 2:6 3:14 7:3,12   |

9:21 88:13 90:22  
 102:11 109:8 158:14  
 168:20 181:3 283:20  
 284:15 351:3 364:9  
**alarm** 4:7  
**ALDP** 18:22 122:21  
 123:5,10,17 126:18  
 126:20,21 138:1  
 141:11 221:12 234:17  
 235:16,21 236:14,18  
 244:18 250:11 261:19  
**alert** 7:22  
**Alex** 9:1  
**align** 232:4 288:1 337:6  
 363:17  
**aligned** 264:17 289:13  
 298:5 313:20 317:15  
 333:1 337:8  
**aligning** 289:3  
**alignment** 240:18 279:8  
 279:13 289:18 319:6  
**aligns** 37:22 372:13  
**all-in-one** 163:10  
**alleviate** 193:6  
**allow** 111:9 117:11,13  
 136:1 193:7 216:13  
 222:8 248:19 255:8  
**allowable** 227:11 368:6  
**allowed** 237:9  
**allowing** 228:20 252:12  
**allows** 41:16 208:16  
 311:9  
**alongside** 286:21  
**alternate** 320:18  
**alternative** 93:6 102:13  
 202:13,19 222:12  
 224:14 228:21 235:21  
 240:16 241:3 250:11  
 258:6 287:21 289:16  
 293:13 300:5 342:7  
 344:13  
**alternatively** 191:5  
**alternatives** 155:14  
 161:10 173:17 174:7  
 190:16 199:14 206:3  
**Alvarez** 10:8  
**Amal** 10:7  
**amalgamation** 40:6  
**amazing** 10:3 91:2  
**ambassadors** 377:12  
**amend** 115:19 138:14  
 365:10  
**amendment** 123:22  
 126:17 139:14 140:11  
 312:11 316:7 318:4  
 322:3 331:22 332:1,3  
**amendments** 294:22  
 363:4

**America** 245:9  
**American** 241:10  
**amount** 10:2 21:10 34:2  
 37:5 44:9 190:19  
 210:7 248:14,19  
 280:13  
**amounts** 68:11  
**analyses** 163:17  
**analysis** 15:21 16:4  
 20:18 70:4 141:4  
 160:9 203:7 216:20  
 231:6 247:4 313:8  
 332:14 359:14 373:7  
**and/or** 33:8  
**Andrew** 1:17 8:21  
**Andy** 44:6 46:14,15  
 54:19 64:9,11 66:9  
 77:5,7 94:22 95:1  
 98:8 100:18 111:20  
 111:21 113:6 119:11  
 120:19,20 124:8  
 132:3 133:8,9 136:8  
 142:22 147:2 150:5,6  
 155:11 174:13,15  
 203:13,14 218:1  
 263:1,2 267:14 287:4  
 287:19 288:5 289:20  
 290:21,22 295:17  
 301:22 312:17,18  
 314:21 316:5,6 322:3  
 331:21 333:14 334:10  
 351:17 352:20,21  
 355:18 357:10 365:10  
 365:11 374:13  
**Andy's** 99:17 103:22  
 128:4 317:20  
**anecdotal** 185:18  
**angst** 189:6  
**animal** 354:22  
**Ann** 2:15 249:7  
**Anna** 2:12 10:11 11:12  
**Annette** 2:18 258:21  
**anniversary** 186:16  
 377:20  
**annual** 18:15 21:1,20  
 22:9,13 39:5,13  
 101:10,22 110:13  
 115:12 116:14,18  
 118:16 128:2,10,15  
 129:1,22 141:13  
 149:15 254:12 261:8  
 283:6 285:3,5 302:8  
 307:7  
**annually** 12:3  
**answer** 66:5 167:16  
 173:7,8,12 175:5  
 209:12 279:19 356:15  
**answered** 271:6

**answers** 134:13 316:19  
**anybody** 28:21 50:12  
 173:6 291:12  
**anyway** 17:4 49:13 50:3  
 96:15 109:7 206:11  
**anyways** 198:8  
**APA** 202:8  
**apart** 326:12  
**API** 240:1  
**Apollo** 256:22  
**Apologies** 320:9 328:7  
**apologize** 24:8 200:6  
 290:10  
**apparent** 234:21  
**Apparently** 173:8 337:2  
**appear** 321:6  
**appears** 248:16  
**apple** 156:2  
**apple-to-** 156:1  
**applicability** 26:3 28:15  
 140:5 141:6 148:11  
 169:8 198:7 222:20  
 224:6 231:10 232:6  
 233:19 335:21 336:10  
 336:22  
**applicable** 18:22 24:19  
 109:22 110:17 123:6  
 123:11 182:16 236:19  
 237:15 238:5 245:2  
 264:10 272:11 297:14  
 314:2,7 333:5,9 344:5  
 344:12 345:18 363:1  
 363:2  
**application** 47:7 185:21  
 186:4 244:11  
**applied** 128:22 189:22  
 232:21 235:1  
**applies** 18:8 19:17  
 184:20 221:16,17  
 223:20 230:12 233:15  
 234:1,18 236:15  
 345:6  
**apply** 19:2 25:1,3,8,16  
 38:2 40:16 63:22  
 64:17 83:7,12,17  
 104:12 121:12 163:3  
 171:8 221:14 222:3,6  
 223:1 226:6 227:7,15  
 229:12 234:4 240:5  
 244:13,19 248:13  
 250:12 255:15 265:3  
 272:12 274:18 298:19  
 303:12 314:9 318:16  
 326:2 329:5,6 333:10  
 336:1 346:8 356:12  
 371:4  
**applying** 40:17 128:8  
 180:11 234:9 235:14

260:6 303:19 343:2  
**appointed** 379:11  
**appreciate** 35:8 36:19  
 77:8 95:2 101:5 114:5  
 120:21 126:12 127:6  
 146:2 166:19 174:16  
 174:18 185:4 188:2  
 203:15 245:9 246:3  
 249:4 251:11 253:11  
 258:17 279:2 291:13  
 340:17 345:13 351:10  
**appreciated** 111:22  
 213:15  
**appreciates** 231:6  
 233:18 238:17 241:20  
**approach** 36:3 37:7,18  
 40:22 41:4 42:6 82:11  
 100:16 103:2,6  
 121:18 163:5 224:18  
 242:19 279:14,15  
 345:22 346:3,16  
 379:18  
**approaches** 50:6 74:22  
 342:2,3,7 345:16,19  
 346:7 353:11  
**approaching** 268:17  
**appropriate** 28:17  
 43:15 73:14,22 74:21  
 75:5 76:17 104:13,15  
 106:15 108:19 109:2  
 112:11 124:16 125:19  
 125:22 127:11,15  
 134:7 139:4 190:2  
 192:3 200:22 202:11  
 231:8 234:22 250:13  
 258:2 268:5 285:15  
 298:7 301:15 303:12  
 308:5 316:13 339:20  
 342:19 346:8 355:2  
 358:19 371:5  
**appropriately** 289:22  
 358:15  
**appropriateness** 93:17  
 371:18 373:13  
**approval** 331:20  
**approve** 326:15 329:15  
**approved** 308:3 314:6  
 321:22 322:9,21  
 323:21 324:7,11  
 325:15 326:21 327:21  
 328:21 329:9,15  
 330:10 333:8  
**approves** 322:10  
 326:14  
**approximate** 163:4  
**approximately** 27:15  
 44:13 261:2  
**appurtenances** 230:10

**April** 5:20 256:21  
378:11  
**area** 3:9 31:1,4,5 32:4,6  
33:18 35:11,13 43:3  
56:19 57:2 63:16,17  
70:11 146:2 152:14  
157:19 213:5 247:20  
252:8 262:1 281:10  
284:19 285:2,22  
318:10  
**areas** 24:6 33:13 34:19  
63:20 70:17 74:8  
120:10,14 155:3  
178:10 187:3 208:16  
214:5 229:13 240:13  
268:19 273:16 284:5  
350:6  
**aren't** 48:3 88:20 96:6  
107:19 155:3 175:12  
275:4 327:2  
**arena** 261:10  
**argue** 97:6  
**argument** 353:6  
**arguments** 165:12  
202:3  
**Ariaratnam** 1:14 9:15  
9:16 143:15,16  
218:16,17 335:3,4  
375:6,7  
**Arizona** 1:14 246:10  
**Arkansas** 1:19  
**Arlington** 1:10  
**arms** 64:11 95:4 293:5  
**Army** 1:20 168:12  
359:10 373:3  
**articulate** 349:9  
**Arvind** 1:21 9:8 38:19  
50:13 53:11 58:18  
59:13 66:9 77:5 80:4  
99:15,16 111:22  
121:22 143:8 151:12  
151:13 170:17 172:10  
172:11 174:22 202:13  
218:9 265:6 292:4,5  
297:14 301:10 305:22  
307:9 334:18 373:18  
374:21  
**Arvind's** 162:12 298:1  
**ASAP** 305:9  
**Asebe** 10:12  
**asked** 6:20 101:6  
226:18 227:9 229:11  
282:18 345:5 351:4  
**asking** 173:18 199:13  
278:6 281:20 311:2  
348:12 371:6  
**aspect** 190:7  
**aspects** 155:22 231:22

232:20 242:10 253:19  
**assessed** 16:3  
**assessing** 120:14  
**assessment** 119:22  
131:5 141:5 216:21  
230:17,19,21 313:9  
332:15 359:14 373:7  
**asset** 64:17 65:4,10  
66:5  
**assets** 47:11,12 50:8  
51:17 64:19,22 65:13  
65:15 95:18 98:13  
106:21  
**Assistant** 2:7,10  
**Associate** 2:6 3:15  
**associated** 23:13 84:15  
150:17 151:1 299:16  
**Association** 1:18  
208:14 245:9 375:20  
**assume** 311:6 331:5  
**assuming** 27:21 202:22  
**assumption** 20:15  
204:4  
**atmosphere** 54:4 258:1  
**atoms** 255:12  
**attached** 155:22  
**attack** 70:18  
**attempt** 107:18 128:15  
163:3 356:1  
**attempts** 93:1  
**attendees** 6:5  
**attending** 3:7 4:3  
**attention** 345:14  
**Attorney** 223:9 226:11  
232:7 237:10  
**attorneys** 164:17  
**attributed** 196:16  
**attributes** 147:18  
182:14 232:19  
**attribution** 294:4  
**Austin** 1:21  
**authoritative** 186:2  
**authority** 24:9,12 25:3  
25:14 145:4,17  
148:15,18 164:16  
165:3,7 171:5 193:19  
223:4,15,18 314:8  
319:20 333:10  
**authorizes** 171:1  
**availability** 311:16  
**available** 5:22 7:13  
55:22 56:11 57:22  
59:5,21 82:2 97:18  
99:22 105:8 171:13  
186:21,21,22 197:5  
235:9,19 242:21  
243:2,7 293:21  
**avenues** 76:19

**average** 23:12 100:13  
**avoid** 61:19 232:5  
269:19 270:10 319:15  
330:22 340:20,21  
**Award** 376:1  
**aware** 15:17 23:1 50:3  
219:12  
**awareness** 150:19,20  
156:15 157:6 158:16  
159:3 166:20 167:22  
176:3,13,16 179:12  
179:14,16,17 180:6  
181:18 183:9 184:18  
184:19 187:5 190:1  
191:10 207:6 211:21  
212:2

## B

**B** 18:19 19:6,8,18,21  
20:16 21:3 22:9 25:21  
26:1 34:1 35:15 39:5  
39:8 40:17 56:20 84:7  
84:14 86:22 87:22  
95:13 124:5,11  
139:15,19 140:6,14  
141:6,12 144:13  
145:1,10,18 149:7  
152:1 158:4 169:9  
172:4 197:16 200:9  
210:14,15 214:4  
216:22 234:20  
**back** 4:12 9:21 10:14  
39:6 42:3,21 46:16  
47:14 48:12 55:18  
62:10 64:12 65:2,2  
72:10 76:6 79:19 91:6  
91:8,15,18 92:1 94:10  
105:12 107:3 114:15  
114:21 115:4 125:5  
129:19 132:18 143:21  
150:14 155:11 168:19  
169:13 178:13 183:3  
191:16 200:12 206:9  
210:11 219:4,16,20  
239:8,12 256:8,13,21  
264:8 269:18 277:1,2  
277:5 285:19 288:12  
290:20 306:14 311:5  
349:18 362:21 364:3  
371:2 372:14 375:18  
376:17,18 379:7,11  
**background** 29:9,15  
267:3  
**backing** 106:2 244:21  
**backstop** 272:9,15  
315:6,15,21 317:16  
**backup** 280:2  
**backwards** 107:2 319:5

**backyard** 83:9 256:3  
309:20  
**bad** 192:1  
**ball** 202:4  
**Baltimore** 284:8  
**bang** 189:8  
**bank** 48:19  
**bar** 182:13  
**Barnich** 376:1  
**barrel** 366:21  
**base** 66:5  
**based** 20:19 23:20  
27:13,15 39:5 41:7  
76:11 93:18 94:17  
96:10 106:13,13,14  
107:7,7 130:14  
137:10 198:3 247:7  
248:15 263:19 267:16  
284:18 312:5 330:14  
339:7  
**baseline** 22:17 110:9  
119:16 123:5 131:8  
135:3 273:10 274:15  
315:6  
**basic** 6:12,13 17:4  
203:11  
**basically** 19:16 21:10  
21:20 32:20 33:4,7  
64:22 65:7 102:22  
115:11 116:22 130:18  
135:9,13 144:21  
183:17 187:5 203:16  
264:17 275:3 280:2  
324:2 346:13 350:3  
361:15  
**basin** 35:10 36:15 52:6  
57:9 62:15 63:3 64:2  
136:6  
**basins** 53:1 135:11,12  
**basis** 115:12 176:17  
188:19 276:12  
**Bcf** 280:9  
**bear** 35:8 46:13 50:5,7  
68:13 92:7,17 346:17  
**beg** 367:2  
**beginning** 139:14  
**behalf** 125:7 252:21  
**believe** 11:13 14:8  
17:20,22 43:4 44:20  
53:13 81:12,14 92:19  
101:16 126:16 140:7  
144:8 145:17 169:2  
187:13 203:9 207:20  
215:14 245:2 248:12  
248:18,20 250:11  
310:13,20 318:12  
319:14 340:18 349:11  
362:8

**believer** 377:1  
**Bellingham** 186:17  
**Ben** 2:16 245:7  
**beneficial** 163:11 197:3  
 238:2  
**benefit** 70:15 71:5  
 74:10 90:12 120:6,13  
 146:18 150:2 156:9  
 164:6 165:21 184:17  
 185:8,13 273:3  
 278:16  
**benefits** 16:3,16 17:1,7  
 89:5 177:2 185:5  
 194:13  
**best** 4:1,4 75:13 109:5  
 279:14 297:14 300:8  
 341:5 342:22 353:15  
**better** 53:16 67:10  
 75:10,21,21,21 82:17  
 96:8,9 106:19 130:4  
 148:9 163:13 200:16  
 293:14 355:22 378:13  
**beyond** 70:9 98:19  
 101:21 112:3 120:14  
 121:16 127:12 187:22  
 209:16 254:11,15  
 255:2  
**BGE's** 284:7  
**BHE** 2:19 244:8  
**bicarbonate** 66:18  
**big** 40:9,18 55:8,9  
 78:10 96:11,11 99:10  
 103:20,20,21 126:22  
 133:14 148:5 151:10  
 152:6 169:19 180:7  
 276:4 285:20 286:14  
 315:2 377:1  
**bigger** 78:16 96:3  
 278:18  
**biggest** 152:9 254:15  
**Bill** 2:15 257:16  
**billion** 153:3  
**binary** 77:12 203:16  
 215:13,22  
**bit** 13:16 14:5 16:21  
 29:8 32:16 57:4 72:15  
 91:7 96:19 102:2  
 108:10 116:21 121:8  
 123:16 128:2 134:16  
 145:1 176:13 186:10  
 209:2 247:3 257:18  
 267:21 283:22 363:6  
**blanket** 168:5  
**blend** 237:8 245:17  
 252:4  
**blended** 221:20 222:3  
 252:13,17 255:1,5  
**blendeds** 255:9

**blending** 239:1 247:22  
 248:6 249:1 251:6  
 252:11 258:14,18  
**blends** 222:1 237:12  
 251:14 258:7  
**blossoms** 3:11,13 92:9  
**blow** 274:3 281:5  
**blowdown** 220:11  
 224:3,11 225:13  
 336:2 337:21 338:19  
 338:21 340:14 341:7  
 341:21 342:4,18  
 343:1 344:17 345:16  
 347:17 356:13 359:15  
 361:6,20 362:11  
 364:15 369:7 373:8  
**blowdowns** 55:3 221:4  
 224:15 225:4 226:5  
 336:6 338:2,10 339:9  
 339:13 340:2 341:11  
 347:11 348:13 353:12  
 354:8 358:5,11  
**blowing** 340:20  
**blue** 36:6  
**blunt** 212:8  
**board** 92:4 213:22  
 375:19  
**Bodell** 2:6 220:1,3,4  
 262:20  
**body** 164:15 170:13  
 202:7  
**boil-** 224:15 358:11  
**boil-downs** 241:5  
**boil-off** 224:3 225:4  
 336:3 337:21 345:22  
 348:14 354:8,19  
 358:5 359:15 361:6  
 364:15 373:8  
**boil-offs** 241:5 340:2  
 353:12  
**bold** 180:17  
**bomb** 309:21  
**boosting** 23:19  
**bottom** 150:9 364:12  
**bovine** 256:14  
**box** 30:12  
**boys** 186:19  
**break** 80:2 88:14 91:3  
 91:18 92:2 101:3  
 112:22 113:19 114:12  
 117:4 121:1 133:11  
 143:21 219:4  
**breakdown** 33:12  
**breakdowns** 32:15  
**breaking** 83:10 87:5  
 176:6  
**Brian** 2:3 8:19 142:20  
 165:9 169:21 170:1

217:21 282:14,15  
 283:14 305:17,18  
 334:8 337:4,5 372:5,6  
 374:11  
**Briana** 10:11  
**brief** 4:6 19:14 24:11  
 170:1  
**briefing** 18:10 24:10  
**briefly** 59:12 85:1 379:2  
**bring** 4:1 29:10 49:21  
 50:1,2,7 62:1 65:17  
 85:3 193:9 210:12  
 347:14  
**bringing** 34:4 49:1  
 121:5  
**brings** 61:3  
**broad** 25:13 223:15  
 240:4,9 367:18  
**broadly** 155:1  
**broken** 123:8 124:6  
 188:4  
**brought** 31:13 47:3,22  
 50:5,7 352:12  
**Brown** 4:2 379:2  
**BS** 256:14  
**buck** 189:8  
**build** 62:6 183:19  
 250:20  
**building** 38:6 104:4  
 141:17 320:9  
**built** 54:8 277:16  
 311:22 312:11 362:10  
 369:3  
**bullet** 37:21 71:14  
 107:21,21 111:18  
 115:11,20 116:2,19  
 121:4 124:1 126:16  
 131:16 138:14 139:3  
 139:10,10,17 161:18  
 197:14 288:11 289:16  
 298:8,14,18 301:21  
 305:20 306:10,12  
 310:8 311:2 314:8  
 320:19 321:11,12,15  
 321:17 323:8 327:22  
 364:12,16 365:6,6  
 371:17 372:8,19,20  
**bullets** 28:13 107:19  
 108:17 121:12 126:2  
 197:13  
**burden** 46:12 146:18  
 175:19 180:21 182:21  
 278:16  
**burdens** 238:1  
**burdensome** 150:18  
 168:8 182:22 204:6,9  
**bureaucracy** 151:7  
 167:6

**Burman** 1:15 8:9,10  
 72:12,13 114:5  
 142:10,11 155:7,8  
 156:7 161:3,4 173:12  
 174:16 189:20 191:3  
 199:1,11 215:9  
 217:11,12 276:18  
 295:4 302:17 304:20  
 323:7,16,18 324:13  
 324:15,18 325:2  
 326:6,8 330:18  
 331:18 332:8,11  
 333:20,21 348:8,10  
 348:18 350:13,20  
 357:14,18,22 360:4  
 360:13 364:21 370:8  
 374:1,2 375:14  
 376:12  
**Burman's** 77:8 162:8  
 203:15  
**burn** 63:16  
**business** 2:3 119:1  
**businesses** 252:7

---

**C**


---

**C** 18:19 19:3,6,8 20:3,5  
 20:15,19 21:2,3,5,5,7  
 21:8,10,14,22 22:1,6  
 22:9,12,15 23:3,7  
 24:13 25:20,22 26:2  
 27:5 28:16 32:18,20  
 32:22 34:4,7,9,12  
 35:18,19,21 36:1 38:1  
 38:3,14 39:1,5,8  
 40:10,15,18,20,22  
 41:6 42:8,12 43:17  
 45:2,6,17 48:3 49:1,5  
 53:2 56:20 60:17  
 62:13 68:21 71:22  
 81:17 82:22 83:13  
 84:8,15,16 85:22 86:6  
 86:11,15,22 88:5 90:3  
 93:3,21 94:2 95:12,13  
 97:2,10,16 100:6,9,12  
 102:5,6 103:1 104:12  
 104:21 105:6,18  
 108:3,11,20 109:19  
 109:22 110:2 115:14  
 116:3,10,12,15,19,20  
 121:16 123:6,11  
 124:11,12,13,18  
 127:18 128:20 129:1  
 129:22 130:1 138:22  
 139:15,16,19,21  
 140:6,14 141:6,12,13  
 141:20 144:13 145:1  
 145:10,18 149:7  
 152:1 158:2 169:9

172:4 197:16 200:10  
 209:17 210:22 211:18  
 216:22  
**C1** 83:3  
**calculate** 231:3  
**calculated** 27:10  
**calculating** 44:16  
**calculation** 46:2  
**calculations** 247:8  
**calendar** 226:17 234:15  
**calibrate** 89:15  
**California** 246:10 248:5  
 248:8  
**call** 7:8 8:3 140:17  
 150:21 201:13 256:13  
 371:22 380:2  
**calling** 129:9  
**Cameron** 2:10 8:4,7  
 10:7 142:5 217:6  
 314:15 333:15 360:1  
 373:19  
**campaign** 57:14 132:22  
 196:13 197:2 228:9  
**campaigns** 57:15 80:9  
 82:18 196:2,2,8  
**can't** 43:7 86:5 90:2  
 99:5 127:12 152:1,16  
 176:7 201:13 206:15  
 214:7 261:15 293:3,7  
 293:9 305:7 309:9  
 349:17 360:18 369:8  
**Canada** 33:19 241:15  
**canvass** 101:8 120:9  
**canvassed** 101:16  
**canvassing** 127:8  
**capabilities** 184:13  
**capability** 185:12 230:2  
**capable** 57:11 229:5  
**capacity** 94:7 259:3  
**capture** 37:8 54:17 89:6  
 202:9 207:21 237:16  
 298:8 321:5  
**captured** 169:1 303:16  
 350:10  
**capturing** 202:15  
 304:15  
**car** 369:2,4  
**Caram** 2:15 257:16,16  
**card** 53:5 92:11 106:1  
 140:15 173:10 186:14  
 207:14 210:9,12  
 212:19  
**cards** 7:22 140:16  
 169:15 312:22  
**care** 175:15  
**careful** 54:11 77:16  
 98:11 274:3 281:13  
 287:6 299:6 301:6

362:15  
**carefully** 76:13 82:21  
 87:20 96:5  
**caring** 378:8  
**carried** 252:7  
**carries** 143:18 335:6  
 375:9  
**Carroll** 10:9  
**carrying** 209:8 210:6  
**case** 31:11 164:11  
 181:6 213:20 273:15  
 274:17 281:18 345:21  
**cases** 292:20 348:22  
**cast** 129:3  
**casual** 267:15  
**catch** 110:10  
**categories** 82:22 83:2  
 88:22,22 185:22  
 266:3,5  
**categorizing** 54:11  
**category** 60:20 83:14  
 152:5 186:7 266:3  
**caused** 250:2  
**causing** 6:15  
**caution** 43:1 63:2 151:8  
 310:4 340:8  
**cautious** 345:7  
**caveat** 22:21  
**caveats** 27:18 199:13  
 200:10  
**CCMG** 87:9  
**center** 310:19  
**centered** 202:3  
**CenterPoint** 2:20  
 251:21,22  
**centers** 247:1  
**central** 154:1,2,20  
**cents** 107:9  
**century** 187:21  
**certain** 25:2 47:20  
 48:14 65:13 72:7 74:8  
 105:3 139:1 196:22  
 213:3,5 274:5 285:17  
 306:4 311:3 362:11  
 369:14,22  
**certainly** 37:8 108:9  
 162:8 165:3 185:18  
 253:12 254:4,10  
 263:19 268:1 340:21  
 352:7  
**cetera** 14:20,20 126:6,6  
**CFR** 232:4 325:12,18  
**Chace** 1:16 8:11,12  
 142:12,13 157:12,12  
 210:10,10 217:13,14  
 309:15,15 310:10,13  
 333:22 334:1 374:3,4  
**Chad** 1:18 2:4 9:4,6

29:4,6 38:17 40:1,3  
 42:17 44:8,21 45:11  
 45:12 53:6,9 55:2,17  
 56:14 59:17 62:19,22  
 69:18,20 71:12 80:21  
 86:20 88:13,16,17  
 98:22 99:15 100:22  
 101:2 102:21 107:13  
 111:20 112:21 113:21  
 114:1,9,10 115:1  
 116:17 119:10,13  
 124:8 127:3,4 128:12  
 128:14 129:21 130:9  
 130:11 133:11 134:22  
 135:1 137:11,13  
 139:6,7 140:21 143:4  
 143:6 145:21 146:1  
 148:6 156:3,6 165:9  
 165:10 176:11 178:20  
 178:22 183:1 187:16  
 187:18 200:5 201:12  
 207:11 208:11,13  
 209:11 210:12 211:3  
 211:5 212:12,18  
 213:16 218:5,7  
 269:14,16 271:4  
 272:19 273:19,21  
 277:10,11 279:2,16  
 279:18 281:16 282:18  
 284:14 287:16,18  
 291:7,9 295:5 298:21  
 299:1 300:4 303:20  
 306:19,22 309:16  
 316:21 317:1 319:2,4  
 322:5,7 334:14,16  
 338:5,7 340:6 343:10  
 343:12 346:19 349:1  
 352:12 354:18 361:8  
 361:10 367:10 368:11  
 370:17 372:13 374:17  
 374:19  
**Chad's** 80:6 109:17  
 168:16 170:7 172:12  
 182:10 200:4 292:11  
 301:12  
**chain** 90:19  
**chair** 1:11,13 3:21 7:5  
 129:10 145:15 197:7  
 348:8  
**Chairman** 7:1,1 11:2  
 15:12 17:12 26:6  
 37:17 101:6 107:14  
 112:5 188:2 197:21  
 198:3 239:12,21  
 335:18 336:8 363:12  
 373:2  
**chairperson** 3:20 5:15  
 6:18 7:7

**challenge** 43:2 46:10  
 121:16 127:7 135:21  
 167:6 176:12 188:3  
 221:5 294:11  
**challenges** 36:22 43:19  
 109:3 251:2,15 362:9  
**challenging** 31:18  
 34:20 36:5,11 99:20  
 129:17 163:1 293:18  
 294:2,5,16  
**change** 16:1,21 59:3  
 94:13,18 112:1 122:5  
 133:14 161:17 198:10  
 213:6 354:10 355:3  
 363:5  
**changed** 16:10 170:12  
 288:6 358:21  
**changes** 16:5 94:17  
 223:7 236:18 238:3  
 246:16 298:18 313:13  
 316:6 332:18 359:18  
 373:11  
**changing** 63:9 109:16  
**characteristics** 68:1  
 147:8 158:3 347:22  
 348:3,15,20 350:5  
 352:7 353:13 355:8  
 357:7 358:10 359:19  
 360:6 363:22 366:11  
 368:5,18 370:6  
 373:12  
**charged** 176:20 177:19  
**charts** 118:3  
**check** 5:9 45:9 57:17  
 113:20 329:3  
**checked** 132:17  
**chemical** 154:13  
**Cheniere** 2:19 239:22  
**cherry** 3:11,13 92:9  
**Chief** 2:7,10  
**choice** 200:1  
**choices** 96:9  
**choose** 67:14  
**chose** 22:5  
**Chris** 2:19 239:22  
**chunk** 90:15  
**circles** 136:19  
**circumstances** 72:7  
 118:6 285:17  
**cities** 208:18,19  
**city** 2:1 191:13 265:22  
 283:12 286:17 295:9  
 295:12  
**claim** 119:22  
**clarification** 38:21  
 227:10 264:6 265:12  
 281:3 291:18 297:9  
 323:22 358:7

|                                 |                                |                              |                               |
|---------------------------------|--------------------------------|------------------------------|-------------------------------|
| <b>clarified</b> 255:8          | 378:19                         | 18:11 20:20 39:16            | 308:15 309:2 312:12           |
| <b>clarify</b> 27:1 39:20       | <b>colleague</b> 375:14        | 77:8 93:9 94:20              | 313:21 316:13,20              |
| 122:14 124:10 224:9             | <b>colleagues</b> 210:17       | 105:13 120:21 127:7          | 333:2 335:20 341:22           |
| 225:12 227:19 264:19            | <b>collect</b> 148:19 160:21   | 145:3 146:22 148:2           | 342:12 350:9 352:3            |
| 312:4 326:8                     | 171:1,5 238:22                 | 149:10 156:7 159:11          | 371:11 372:3 375:15           |
| <b>clarifying</b> 42:2 116:6    | 251:12                         | 159:11,14 168:16             | 375:21 379:9                  |
| 136:21 140:13 248:21            | <b>collected</b> 153:8 173:1   | 174:16 182:11 188:3          | <b>committee's</b> 144:11     |
| 262:21 266:12 323:8             | 180:3                          | 191:15 203:20 206:11         | 246:2                         |
| 358:3                           | <b>collecting</b> 148:13       | 207:19 216:9 222:20          | <b>committees</b> 379:16      |
| <b>clarity</b> 63:5 127:1 160:3 | <b>collection</b> 171:8 182:13 | 223:14,17 224:2              | <b>committing</b> 378:18      |
| 161:15 232:6 237:11             | 238:19 239:6 251:9             | 225:3 226:9 228:1,17         | <b>commodity</b> 147:19       |
| 249:14 319:22 324:8             | 258:18                         | 231:7 232:2 233:18           | 171:17                        |
| 364:22                          | <b>collective</b> 363:15       | 237:1 239:15,18              | <b>common</b> 76:6 198:12     |
| <b>class</b> 13:6 14:21 15:2    | 378:16                         | 240:3 244:9 253:13           | <b>communicate</b> 176:19     |
| 19:19 141:19 213:6              | <b>combination</b> 325:21      | 255:3 265:5,17               | <b>communicating</b> 179:18   |
| 254:14 284:19 285:1             | <b>combined</b> 86:22 100:18   | 267:16 282:6 316:14          | 179:19                        |
| 286:9,10 287:2                  | 258:22                         | 316:20 351:9 358:14          | <b>communication</b> 154:2    |
| 290:14 308:13                   | <b>come</b> 31:9 34:13 64:11   | 361:1                        | <b>communities</b> 84:11      |
| <b>classes</b> 214:13           | 84:4 90:16 91:6,8              | <b>commerce</b> 301:7        | 154:9,22 155:1                |
| <b>classification</b> 20:6 38:8 | 101:14 105:1 112:17            | <b>commercial</b> 261:18     | 162:16 164:1,10               |
| 71:4 188:13 222:9               | 137:22 143:21 155:11           | <b>commercially</b> 56:10    | 173:18,21 187:7               |
| 237:9                           | 160:1 169:13 174:9             | 59:5 105:8 235:9             | 195:13 208:20 233:7           |
| <b>classifications</b> 19:12    | 215:1 219:4,16                 | 243:2                        | 249:18 256:4 286:22           |
| <b>classified</b> 20:11         | 255:13 309:13 330:8            | <b>commission</b> 1:14,15,16 | <b>community</b> 83:9 190:4   |
| <b>classifying</b> 237:4        | 335:12                         | 2:2 4:1 7:7 62:11            | 195:14 238:15 250:15          |
| <b>Clayton</b> 2:6 219:22       | <b>comes</b> 87:3,4 104:19     | 171:11 182:15 213:2          | 286:17,18                     |
| 220:2,4 262:19                  | 150:7 177:11 205:14            | 376:16 377:18                | <b>community-level</b> 163:8  |
| <b>Clean</b> 328:12,21 329:12   | 215:17 242:15,19               | <b>commissioner</b> 77:8     | <b>companies</b> 2:4 87:10    |
| 330:2,15                        | <b>comfortable</b> 115:10      | 78:6 155:7 156:7             | 87:12                         |
| <b>clear</b> 12:9 24:12 38:13   | 138:12 290:15 306:17           | 162:8 174:16 203:15          | <b>company</b> 2:17 87:7      |
| 69:21 81:13 88:20               | 308:20 357:8,9                 | 210:1 376:18,19              | 135:9 241:12 252:21           |
| 89:7 96:4 105:17                | <b>coming</b> 48:16 61:6,7     | <b>commissioners</b> 375:21  | 252:22 254:21 262:10          |
| 108:21 121:3 123:16             | 76:22 81:13 89:18              | 376:8                        | 282:19                        |
| 126:17 146:3 165:14             | 96:18 167:7 215:12             | <b>commissions</b> 208:17    | <b>comparable</b> 260:5       |
| 170:5,15 179:1,11               | 282:18 294:12 376:17           | <b>commitments</b> 221:6     | 264:15 272:16 274:8           |
| 194:13 198:1 263:5              | <b>commas</b> 315:19           | <b>committee</b> 1:5,10 3:8  | 320:21 326:2                  |
| 276:16 281:17 310:7             | <b>comment</b> 8:1 26:8        | 3:17 5:18 6:11 7:9           | <b>compare</b> 16:8 68:7      |
| 317:10 330:13 347:16            | 47:14 80:6 105:15              | 12:11,19 13:2,5 14:2         | <b>compared</b> 23:18 62:10   |
| 367:12                          | 115:1 121:22 160:17            | 14:20 25:19 26:7,12          | 84:13 251:16 338:20           |
| <b>clearly</b> 4:9 48:17        | 187:19 198:20 219:14           | 26:14 28:14 40:13            | 342:9 344:15 350:8            |
| 125:15 146:4 350:22             | 222:15 227:4 231:12            | 61:20 91:4 104:15            | <b>compares</b> 21:18         |
| <b>CLEGG</b> 2:7                | 238:10,18 239:4,4,10           | 123:18 125:16 126:14         | <b>comparing</b> 160:10       |
| <b>climate</b> 16:1 59:3 94:12  | 239:12,15 245:10               | 127:10 130:6 138:22          | <b>comparison</b> 156:2       |
| 94:17                           | 247:19 251:17 260:19           | 141:1 145:14 148:1           | <b>compelling</b> 121:22      |
| <b>close</b> 33:8 34:10 91:8    | 262:14,17 263:3,19             | 148:17 149:21 159:8          | 132:11                        |
| 101:13 129:9 208:19             | 277:13 278:21 287:9            | 167:12 178:14 199:4          | <b>compiled</b> 156:21        |
| 208:20 290:1 328:9              | 291:13,21 292:1,11             | 199:20 201:9 205:7           | <b>complete</b> 13:3 14:9,11  |
| 372:20 375:13                   | 363:11                         | 207:2,18 208:4               | 14:19 23:6 143:22             |
| <b>closeness</b> 129:13         | <b>commented</b> 230:20        | 212:13 215:3,6               | 178:11 225:2 241:1            |
| <b>CO2</b> 257:21               | 231:12 237:13,19               | 216:14 219:1 225:21          | 336:9                         |
| <b>coast</b> 33:19 241:19       | <b>commenter</b> 228:10        | 226:3,4 227:1,14             | <b>completed</b> 12:19 13:8   |
| 260:21 284:7                    | 230:18 235:2 238:12            | 228:14 229:19,22             | 13:10 18:9 311:15             |
| <b>code</b> 32:19,22 117:13     | <b>commenters</b> 2:14         | 232:11 233:21 234:14         | <b>completely</b> 48:10 133:5 |
| 125:7 179:13 184:19             | 232:19 237:5 252:15            | 239:3 240:11,16,21           | 159:20 230:19                 |
| 184:22 185:1                    | 277:18 291:14 292:17           | 260:18 261:11,12             | <b>completes</b> 250:5        |
| <b>codified</b> 24:18           | 342:10                         | 262:19 263:16,20             | <b>completing</b> 82:12       |
| <b>cognizant</b> 73:8           | <b>comments</b> 5:10,14,16     | 268:8 269:4 275:11           | <b>completion</b> 13:4        |
| <b>collaboratively</b> 377:3    | 5:17,20 6:7 7:19               | 287:1 289:14 297:15          | <b>complex</b> 31:6 36:4      |

41:17 67:1 83:4  
 135:19 156:20 180:11  
 240:12 276:4 292:17  
 294:6,14 299:13,20  
 338:22 340:16 344:1  
**complexity** 362:17  
**compliance** 13:21  
 14:19 23:3,8 28:17  
 61:7,22 83:6 88:1  
 93:7,11 104:21 105:1  
 105:21 137:2,6,10,15  
 138:1 139:2 141:22  
 225:19 237:22 320:20  
 321:18 323:9 331:1  
 332:18  
**complicated** 103:14  
 181:10  
**complimentary** 276:11  
**comply** 61:2 227:17  
 267:5 323:4  
**component** 80:13  
 100:4 118:15 126:22  
**components** 16:1  
 122:16 226:16 229:13  
**comprehensive** 51:3  
**compression** 344:2,3,4  
**compressor** 226:20  
 244:12 259:22 263:11  
 263:21 264:13 265:11  
 265:20 270:20 294:1  
 294:3,17 320:12  
 322:17 325:9,20,22  
 356:13  
**compromise** 128:1  
 132:2 281:14  
**concentrated** 37:2  
**concept** 32:11 33:10  
 36:18 43:21 46:3  
 107:19 108:8 115:6  
 274:9 304:7 317:14  
 319:6  
**concepts** 282:5  
**conceptually** 274:7  
**concern** 75:2 87:3  
 97:15 130:15 154:17  
 186:10 210:5 231:3  
 265:16 285:9 299:5  
 309:7 310:22 330:21  
 359:5  
**concerned** 161:17  
 168:18 190:11 195:12  
 242:11 249:19 277:19  
 278:7 291:4 315:1  
 318:4  
**concerning** 273:9  
**concerns** 73:5,7,10,12  
 74:9 97:22 98:1 113:4  
 132:1 164:14 168:14

168:15 169:5 192:20  
 193:6 233:18 255:2  
 286:18 304:6,11  
 358:19  
**concluded** 17:22  
**concludes** 6:21 262:16  
**conclusion** 260:3  
**conclusions** 17:5  
**concur** 283:13  
**concurring** 372:7  
**conditions** 71:2 227:18  
 246:20  
**conductive** 64:19  
**conduct** 8:2 15:21  
**conducting** 195:1  
 196:1 230:16  
**confidence** 98:9 122:4  
 267:20  
**confident** 349:8 372:11  
**confidently** 99:1  
**confirm** 137:21  
**confirmation** 211:12  
**conflict** 319:18  
**conflicting** 270:6  
**confuse** 323:12  
**confused** 325:4 326:9  
 356:8 360:17 363:13  
**confusion** 232:5 275:17  
**Congress** 24:22 25:5  
 170:6,9  
**congressional** 11:21  
 191:16 223:9  
**congruent** 79:14  
**conjunction** 280:1  
**connect** 31:7,8,10  
**connected** 177:15  
 194:16  
**consensus** 61:12 109:6  
 126:15 129:13,17  
 138:10 197:9 201:3,7  
 203:11 205:8,11,21  
 206:2 208:8 209:15  
 268:21 276:3 309:1  
 317:6 319:14 365:7  
 372:19,20  
**consequences** 74:3,7  
 161:14 242:13  
**consider** 28:16 43:14  
 71:21 72:6 81:19 91:4  
 93:16 109:1 119:9  
 125:18 126:2 131:15  
 159:8 169:7 191:20  
 198:6 199:14,19  
 202:10 214:22 215:3  
 216:13 224:14,20  
 228:11 229:11 240:14  
 240:16 241:3 245:21  
 248:21 250:7 253:19

259:5 263:19 264:22  
 265:4 284:4 289:3  
 296:20 297:2 301:15  
 301:19 311:3 313:13  
 313:19,22 315:14  
 318:20 333:3 347:21  
 348:3,5,13 350:4  
 352:16 354:9 357:7  
 363:3 364:17 366:4  
 366:20 368:17 370:15  
 372:4  
**consideration** 207:21  
 214:10 246:2,3  
 304:10 348:14 363:15  
**considerations** 93:4  
 268:2 287:22 377:15  
**considered** 134:11  
 230:16,22 346:6  
 348:20 353:5 368:5  
**considering** 106:17  
 298:4 304:5 336:4  
 338:1 339:15 341:20  
 352:3 353:13 358:9  
 366:10  
**considers** 289:12  
 332:22 359:18 360:5  
 366:17 370:5 373:11  
**consistency** 302:22  
**consistent** 118:1  
 225:16 228:21 230:11  
 255:16 272:14 274:22  
 298:4 299:3 311:20  
 314:1,9 333:4,11  
**consortiums** 195:22  
 254:22  
**constantly** 63:15  
 178:14  
**constitute** 280:12  
**constraining** 310:4  
**constraints** 77:10  
 78:21 98:14  
**construct** 77:11 121:6  
 129:5  
**constructive** 168:21  
 170:19  
**consultants** 189:11  
**contact** 147:16,17  
 196:11 209:1 236:5  
**containment** 237:18  
**contains** 38:5 141:17  
**contention** 125:11  
 145:2  
**context** 17:2 29:16  
 41:11 58:10 122:20  
 194:1 246:9 248:9,15  
 271:21 292:10 302:10  
 317:9 342:20 353:1  
 354:12 355:4,11

357:10 365:15  
**continuation** 17:14  
**continue** 17:19 18:4  
 67:2 93:13 98:18  
 117:19 154:6 169:9  
 174:11 335:9 358:9  
 378:17  
**continued** 82:15 225:3  
 225:20 227:4 228:17  
 230:18  
**continuing** 129:19  
 232:1,15 235:16  
**continuous** 228:12  
 250:8 287:11 291:14  
 293:17,22 294:5,8,13  
 295:6 305:2 308:12  
 311:17 314:4 333:6  
 377:6  
**continuously** 229:4  
 246:19 378:5,18  
**contours** 55:16  
**contractors** 189:11  
**contrary** 223:8  
**contribute** 52:13  
**control** 211:16 225:7  
 247:1  
**controlled** 243:8  
 343:20  
**conversation** 61:22  
 67:18 69:11,13 71:11  
 77:19 86:18 109:20  
 111:1,7,12,14 113:18  
 115:5 116:21 128:4  
 129:7 130:17 134:10  
 134:17 136:16 169:10  
 177:7 178:1 312:20  
 313:2,3 317:9 350:5  
 356:11 357:3,12,13  
**conversations** 121:2  
 185:19 356:10  
**conversing** 6:14 144:7  
**convert** 166:4  
**converting** 166:12  
**coordinate** 302:9  
**coordinates** 171:16  
 172:20  
**coordination** 10:2  
 270:11  
**Coordinator** 2:12  
**core** 243:18  
**Corporation** 2:17 246:8  
**Corps** 1:20 168:12  
 359:10 373:3  
**correct** 28:3 44:21  
 45:10,17 52:19  
 144:20 239:11 264:19  
 320:5 337:3 351:3  
**correctly** 42:16 44:16

86:20 116:16  
**correlates** 62:12  
**corridor** 4:12,15  
**Corrosion** 211:16  
**corrosive** 221:19  
**cost** 15:18 16:3,7,11,12  
 16:17 17:8 43:12  
 67:19 68:13 69:8,22  
 70:9 71:4 84:1,10  
 190:19 202:17 230:12  
 247:14,17  
**cost-** 70:14 94:7 107:7  
 174:7 247:5 313:11  
 359:16 373:9  
**cost-benefit** 69:22  
 178:13 203:7  
**cost-effective** 72:2,8  
 141:8 217:2 332:17  
**cost-effectiveness**  
 80:7,13 106:14  
**cost-efficient** 99:3,6  
 261:22  
**Costco** 92:14,15  
**costly** 261:20  
**costs** 67:20 69:12  
 72:20 74:1 84:15,18  
 84:20 109:3 231:4  
 237:21  
**cottage** 133:19  
**couldn't** 311:12  
**council** 169:6  
**counsel** 2:7,10 364:3  
**country** 80:9 82:6 147:9  
 172:8 253:1,4 256:2  
 273:6  
**county** 158:19 171:16  
 187:2  
**couple** 15:8 50:15  
 58:17 208:14 209:4  
 211:11 244:9 292:9  
 292:15  
**course** 12:16 14:1  
 148:1 172:21 178:11  
 261:22  
**cover** 15:10 52:6 57:2  
 65:2,20 97:10 120:15  
 130:21 220:8,9 276:7  
 337:9  
**coverage** 160:19 274:8  
**covered** 52:17,21 57:14  
 100:3 106:8,21  
 108:22 133:1 138:18  
 211:10 226:8 264:12  
 265:2,12 266:1,6  
 269:11 272:4,5,20,21  
 276:1 278:12 313:15  
 315:16 317:12 320:2  
 320:3

**covers** 86:15 116:2  
 212:3,5  
**crack** 79:22  
**cracks** 79:18  
**create** 47:20 53:21  
 82:21 83:2 130:18  
 176:3 185:10 203:2  
 203:19 249:20 251:14  
 255:11 275:17 286:13  
 319:22 328:22 344:21  
**created** 83:14 89:1  
 189:3 203:18 251:3  
**creates** 112:14  
**creating** 88:21 203:16  
**credits** 250:18  
**crisis** 377:1,5  
**crisscross** 31:4 36:14  
 117:10  
**criteria** 103:4 222:8  
 237:14 238:4 296:17  
 312:1,8 368:20  
**critical** 11:22 59:1  
 153:20 163:22 257:7  
 376:5,7 377:7  
**critique** 160:15  
**crossed** 323:9  
**crosses** 162:20  
**crossing** 30:5  
**crumbling** 190:18  
**Cruz** 223:6  
**crystal** 170:5,15  
**Cs** 50:12  
**cubic** 12:2 224:7  
**current** 72:1,9 93:18  
 97:1 101:17 112:14  
 128:20 129:2,5  
 191:21 220:9 221:16  
 221:21 236:1 250:21  
 250:22 274:4  
**currently** 19:3 22:19  
 97:17 117:12 240:8  
 243:7 244:13 245:12  
 245:16 247:21 248:1  
 248:10 254:20 274:5  
 321:16  
**curve** 113:2 167:7  
**customer** 304:10  
**customers** 246:11  
 253:3 304:5  
**cut** 5:15 367:3

---

**D**


---

**D.C** 3:9  
**damage** 84:12 179:22  
 184:21  
**damaged** 257:2  
**dangerous** 234:11  
**Danner** 1:11,13 3:21

7:1,1,2,5 8:13,14 9:19  
 10:16 11:3 17:10  
 26:16 28:5 37:17  
 38:12,16 39:15 41:22  
 42:17 44:5,17 45:11  
 46:14 50:9 52:15 53:4  
 54:18 55:12 62:3,19  
 64:9 66:8 67:15 69:18  
 71:10 77:3 78:6 80:3  
 81:7 88:12 90:21  
 91:16 92:1,17 94:19  
 97:19 98:3 99:14  
 100:22 101:4 102:11  
 103:12 104:6 105:22  
 107:12,14 108:15  
 109:11,14 111:2,16  
 112:5 113:5,21 114:2  
 114:9,14,20 115:19  
 115:22 116:4,17  
 117:16 119:10 120:19  
 122:10 123:21 124:17  
 124:20 126:9 127:2  
 127:19 128:12 129:6  
 129:11 130:9 131:15  
 131:19,22 133:8  
 134:14,22 136:12,15  
 136:18 137:11,19  
 138:5,13 139:6,9,20  
 140:2,4,8,10,19 142:2  
 142:14,15 143:19  
 144:16 145:13 146:21  
 150:5 151:11 153:13  
 155:6 156:3 157:11  
 158:13 159:13 161:2  
 162:3 163:18 165:8  
 168:9 169:12 170:16  
 172:10 173:5 174:13  
 176:10 178:20 181:2  
 182:6 185:14 186:13  
 189:18 191:2,11  
 192:5 194:7 197:6  
 198:14 199:10,21  
 201:11 203:5 204:20  
 206:12 207:12 208:2  
 209:11 210:3,8 211:2  
 212:18 213:12 214:15  
 216:4 217:3,15,16  
 218:20 219:9 239:9  
 239:13 241:7 244:7  
 245:6 246:5 249:6  
 251:18 252:19 255:18  
 257:14 260:15 262:15  
 264:1 265:6,14 266:7  
 267:8,14 268:1,9  
 269:2 270:7 271:3,17  
 272:19 273:12 274:10  
 274:21 276:17 277:9  
 278:20 279:16 281:2

282:13 283:10,20  
 285:12 287:4,15  
 288:7 289:5,8,10,20  
 290:8,17,20 291:7  
 292:3 294:19 295:2  
 295:17,20 296:7,22  
 297:5 298:8,12,21  
 299:22 300:4,8 301:9  
 301:20 302:14,18  
 303:14,20 304:14,18  
 305:13 306:7,19  
 308:1,6 309:6 310:7  
 310:12,16 312:2,17  
 312:21 314:12,17,19  
 315:11,18,22 316:4  
 316:15 317:21 319:2  
 320:1,6 321:3,9,14  
 322:2,12 323:5,15,17  
 324:10,14,16,20  
 325:6 326:4,7 327:15  
 328:3 329:7,20  
 330:16 331:17,19  
 332:4 333:13 334:2,3  
 335:7,13 336:13,18  
 336:20 337:11,16,18  
 339:2,21 341:16  
 343:9 345:10 346:10  
 347:18 348:9,16,19  
 349:22 350:19 351:3  
 351:12,16,22 352:19  
 353:8 354:1,6 355:5  
 356:5 357:5,17,20  
 358:1,13 359:3,6,20  
 360:11,21 361:8  
 362:19 364:4,7,20  
 365:4 366:15 367:9  
 367:21 368:2,10  
 370:7 371:1 372:5,17  
 373:16 374:5,6  
 375:10 380:1  
**Daron** 2:18 260:16  
**dash** 239:6,7  
**data** 25:12 39:3,5,13  
 46:10,17 51:5 52:21  
 62:11 63:1 78:9 84:2  
 85:3,20 93:18 96:4,8  
 96:10 122:2,7 134:8  
 152:2,8 153:7,17,19  
 154:15 156:20 157:2  
 160:16 162:10 165:17  
 166:5 171:12 172:4  
 173:15,16 177:14  
 180:3 181:19 188:17  
 188:18 189:12 193:5  
 196:3 201:19,21  
 202:16 206:22 214:3  
 233:12 293:19,21  
 294:13 298:6

**database** 147:7 149:4  
159:6 183:19 196:8  
196:21  
**databases** 160:11  
**date** 61:4 137:2,8,16,18  
138:7,15 139:2  
141:22  
**dates** 137:15  
**Dave** 7:5 9:22 10:15  
**David** 1:11,13 3:21 8:13  
142:14 217:15 334:2  
374:5  
**day** 11:8 61:6 74:16  
94:13 125:17 200:7  
205:14 208:10 252:3  
259:3 280:10 281:12  
309:22 375:16 380:2  
**day-to-day** 188:19  
**days** 257:4 308:15  
**de** 280:13  
**deadline** 23:3,8 61:22  
104:21 137:6  
**deadlines** 13:21 14:19  
**deal** 41:15 181:1 326:15  
**dealing** 255:5  
**dearly** 379:9  
**debate** 40:10 148:16,18  
165:12 168:21 170:20  
345:6  
**debates** 340:11  
**decades** 53:22 79:15  
166:4  
**December** 12:18 28:10  
**decide** 76:11  
**decided** 175:4 177:10  
377:16  
**deciding** 318:8  
**decision** 192:10 193:19  
219:15  
**decisive** 163:6  
**deck** 17:16 292:7  
**decorum** 6:9  
**dedicated** 248:16  
250:12,20  
**deeper** 247:16  
**default** 235:22  
**Defense** 1:20 147:4  
194:11 264:4  
**defer** 99:6 207:10  
235:14 302:17  
**deferring** 13:17  
**define** 122:3 125:14  
285:13,20 354:5  
**defined** 82:21 87:20  
220:14 223:21 225:7  
353:4  
**defines** 103:1  
**definitely** 91:13

**definition** 32:17 41:7  
**definitions** 32:10  
**degrees** 96:1 121:9  
365:20  
**dehydration** 54:6  
**dekatherms** 252:2  
**Delaware** 35:1 87:8  
**delay** 6:13 231:21  
**delayed** 71:21 72:6  
106:11  
**deleted** 139:8  
**deliberating** 133:10  
**deliver** 349:15  
**delivering** 279:12  
**demonstrate** 56:16  
60:16 205:21 206:1  
224:10 225:19 272:10  
307:19  
**demonstrated** 56:11  
258:13 344:14  
**demonstration** 271:9  
271:14  
**denominator** 198:12  
**department** 1:1 184:12  
195:21  
**depending** 52:6 74:10  
110:20 306:1  
**depends** 81:3  
**deploy** 48:7 79:21  
95:17 99:8 176:9  
342:3  
**deployed** 47:10 56:8  
66:21  
**deploying** 49:5 186:5  
**deployment** 43:9  
**depth** 51:5  
**deputy** 2:7 4:2 335:10  
379:2  
**Deria** 10:7  
**described** 22:21 24:1  
116:19 304:9  
**description** 106:22  
108:22  
**design** 224:18 237:17  
352:8  
**designated** 3:17  
**designation** 54:16  
**designed** 53:20 122:2  
179:6,7 244:3 258:15  
344:16 349:18 362:10  
369:6,7,11,13,22  
**desire** 92:12 163:8  
275:16  
**desk** 10:9  
**detail** 16:14  
**detailed** 188:12 201:5  
343:5  
**details** 151:1

**detect** 56:12 156:13  
229:9 235:10  
**detected** 63:13 70:13  
236:4,9 262:13  
**detecting** 12:6 229:5  
242:8  
**detection** 10:20 12:6,22  
13:13 32:13 37:19  
51:15,18 58:22 68:20  
72:1,3 95:10 116:9  
146:11 156:14 166:22  
167:20 173:2 176:16  
185:5 192:17 207:7  
227:18 228:19 229:1  
229:15,20 233:2,17  
234:21 235:6,10,18  
236:1,11,16 240:4,15  
240:17 242:15,19  
243:4,11,21 247:7  
249:15 250:22 251:8  
252:16 258:4 259:11  
261:14 292:8 308:15  
314:9 333:10  
**detectors** 243:3,7  
246:18,22  
**determination** 61:13  
163:6 186:3,7 270:22  
318:15 326:19 329:2  
**determinations** 165:6  
**determine** 106:13 107:6  
164:15 275:4 324:20  
331:11 358:18  
**determined** 62:14  
83:11  
**determines** 71:22  
326:13  
**determining** 83:6  
125:18 266:17 368:6  
**develop** 12:5 201:4  
229:15 328:15 352:17  
355:20 368:20  
**developed** 40:5 72:2  
150:10 186:20 232:12  
235:7 243:12 350:1  
356:12  
**developers** 208:17  
**developing** 117:8 189:1  
341:5 355:16  
**development** 23:10  
46:22 48:2  
**device** 293:1  
**devices** 54:2 166:8  
235:10 261:14  
**Dewar** 9:1  
**dialogue** 17:20 18:5  
198:3,13 363:15  
364:2  
**diameter** 20:8 31:8,10

33:1,7 34:7,10 35:16  
36:7,12 38:4 45:22  
46:4 53:12 54:15  
62:11 70:19 80:15,17  
80:22 81:3 101:13  
104:3,20 110:4 111:9  
113:13 115:13 116:13  
118:12 141:15,16  
147:19 162:15 171:21  
209:22 211:9,14  
252:6  
**diameters** 105:3 211:19  
**Diane** 1:15 8:9 72:12  
114:2 142:10 161:3  
170:17 173:11 189:19  
191:15 198:21 200:19  
205:18 206:14,15,16  
215:7 217:11 276:17  
292:4 295:3 302:16  
304:18 323:6 326:5  
330:17 332:3 333:20  
348:9 350:12 364:20  
368:11 370:7 374:1  
375:14,18 379:1  
**dictating** 299:8 327:6  
**didn't** 44:18 66:14  
77:15,22 92:11,13  
114:3 117:4 181:15  
191:20 198:18 207:20  
216:8 256:11 312:7  
312:10 347:21 348:5  
**differ** 367:2  
**difference** 16:12 30:15  
99:11 346:11 350:14  
376:20 377:4,10  
378:9,16  
**differences** 242:14  
346:14 351:8 352:11  
**different** 27:3 30:21  
31:17 33:13,13 37:14  
50:4,5,6 54:13 59:15  
65:3 66:5 76:19 78:20  
89:5 96:1,2 104:22  
110:2,3 116:12 117:7  
121:16,17 122:16  
124:11 126:20 132:8  
135:11 148:12 149:1  
168:1,2 176:5,14  
185:22 201:17 203:22  
206:4 207:8 214:13  
214:20 215:16,20  
216:3 242:18 251:14  
251:15 255:15 267:19  
268:19 273:5 277:14  
278:15 279:13 280:19  
280:22 281:11,12  
285:16 287:20 296:15  
299:11 307:15 315:7

315:8 319:1,9,19  
 338:22 340:16 354:22  
 356:10 358:21 363:7  
 363:20  
**differentiate** 112:9  
 204:12 252:10  
**differentiating** 49:14  
 97:4 284:11  
**differentiation** 50:4  
 112:9 121:15 284:1  
**differently** 73:5 75:19  
 291:12 368:13  
**difficult** 209:2 226:15  
 245:21 365:16  
**difficulty** 172:13 266:17  
**dig** 144:18 378:11  
**digitizing** 214:2  
**dilutes** 331:14  
**diluting** 327:10  
**direct** 107:11 173:6,7,8  
 209:12 210:2 236:5  
 275:7 322:11 328:5  
**directed** 192:18  
**directing** 113:6  
**direction** 95:7 127:22  
 213:3 214:8 281:6  
 317:19 357:12  
**directly** 31:14 50:16  
 58:2 109:17 161:16  
 179:18 194:16  
**director** 2:7,13 11:6  
 241:10 246:7  
**directors** 375:19  
**disadvantaged** 286:17  
**disagree** 165:11 273:13  
 291:1  
**disagreed** 291:22  
**disagreement** 123:10  
 330:20 348:17 360:15  
**disagrees** 234:20  
**disclosure** 154:13  
**disconnect** 96:21  
 201:18  
**discount** 15:22 16:6,10  
 16:18 277:1  
**discounts** 331:14  
**discourse** 168:21  
**discover** 192:15  
**discovered** 249:11  
**discovery** 228:14  
 249:12  
**discrepancy** 160:5  
**discretion** 61:18 107:6  
 300:20  
**discuss** 13:18 38:9  
 45:14 91:6 100:16  
 110:5 123:3 144:9,14  
 268:11,12,18 297:18

**discussed** 13:16 26:12  
 27:18 62:7 124:14  
 198:17 223:2 224:16  
 225:22 265:17 269:17  
 342:1  
**discussing** 66:11 148:6  
 151:18 308:17 317:5  
 370:10  
**discussion** 5:11 17:21  
 26:7,15,17 28:7,22  
 40:19 43:14 50:8  
 60:12 77:11 80:19  
 81:12 86:20 91:2,7  
 92:5 93:8 95:6 111:5  
 112:2 137:1,6 144:11  
 145:3 146:15 147:22  
 161:5 174:21 175:11  
 176:7 192:20 199:4  
 201:2 219:11,20  
 220:6 226:4 227:1,14  
 228:15 233:22 253:16  
 262:3 265:19 267:20  
 268:5 269:1,8 271:22  
 277:2 292:6 299:10  
 336:21 338:4 341:10  
 342:21 345:15,17  
 346:7 349:10 350:2  
 360:10 364:2 366:19  
**discussions** 125:15  
 245:13 267:18 340:11  
**dispersed** 252:6  
**display** 81:11  
**disproportionately**  
 51:10  
**disregards** 242:13  
**disrupt** 6:13  
**disrupting** 301:7  
**disruptions** 5:8  
**disrupts** 6:19 90:19  
**dissipates** 234:9  
**distances** 30:6 120:15  
 236:6  
**distinct** 214:13  
**distinction** 27:4 123:12  
 182:20 286:12,13  
 287:2 289:1  
**distinctions** 39:21  
 242:18  
**distinguish** 50:22  
**distractions** 6:16  
**distribution** 12:13  
 43:11 80:20 95:10  
 110:8,14 118:21  
 119:18 146:6,7 158:6  
 165:16 170:7 171:17  
 179:7 191:19 195:10  
 236:20 238:6 246:12  
 248:7 251:7 252:6

258:15 277:21 280:16  
 280:18 282:2,11,19  
 283:1,7,16 285:3,8  
**districts** 119:1  
**diverting** 346:1  
**division** 10:4  
**doable** 66:3 99:1 134:1  
 302:13  
**docket** 5:18,22 7:14  
 57:8 60:5 159:11  
 160:10 239:5  
**document** 272:12  
**documentation** 270:21  
**DOE** 152:21 153:1  
**doesn't** 15:1 39:9 47:10  
 48:20 72:9 73:14  
 105:5 130:18 155:3  
 163:4 164:22 169:4  
 179:14 190:18 199:7  
 201:22 203:1 213:20  
 254:16 276:7,22  
 326:15 329:15 347:6  
 356:15 365:2  
**dog** 92:16  
**doing** 69:4 74:8 80:11  
 86:3 90:17 96:22 97:9  
 99:19 106:3 130:15  
 133:12,17 135:11  
 136:9 150:17 162:22  
 171:10 173:17 177:21  
 178:14 193:14 194:6  
 195:14 202:14 216:1  
 287:11 354:21 356:3  
 368:9 371:7 372:3  
 378:3,15  
**dollars** 153:3  
**don't** 23:6 40:4 41:15  
 42:14 45:19 46:7  
 49:20 50:22 51:4,21  
 52:13,15 59:14 60:2  
 63:18 67:2 69:21  
 72:20 73:8 74:19 77:1  
 86:2,4 90:6,9 94:14  
 96:4 97:13 98:6 99:10  
 108:5 118:2 120:17  
 122:1,6 125:13 127:9  
 130:13 131:2 132:10  
 134:3,5 146:6,16  
 151:6 152:20 153:9  
 155:9,17,19 156:1,9  
 157:16 161:6,19  
 164:13 165:5,12,13  
 167:8,12,19 169:10  
 169:17 170:19 175:2  
 175:3,19 176:5 177:4  
 179:5,9 182:17 187:7  
 187:20 190:8,13  
 191:22 193:12 194:5

198:5,16 199:17  
 200:2,5,12 201:20  
 202:20 203:9 205:11  
 208:8 210:21 215:14  
 215:19 216:2 244:15  
 245:2 252:22 254:20  
 263:8 264:18 268:2  
 268:11 269:2 274:3  
 274:18 275:9 279:13  
 280:15 281:7,8 282:2  
 283:17 285:19 287:9  
 288:16 289:21 290:15  
 291:1,10,19 294:9  
 295:21 296:4,4  
 297:21,22 299:10,17  
 300:6 301:17 303:15  
 304:22 307:2 309:19  
 315:2 317:15 318:5  
 318:16 320:4 322:7,8  
 322:9,10 324:5,13  
 327:4,6,7,11,13  
 330:19 331:10,13  
 337:12 338:14,16,18  
 341:3,12 343:13  
 344:19 345:3 346:15  
 346:20 347:5,22  
 348:4,5,16 349:11  
 354:10,17 355:2  
 357:3 358:13 360:4  
 360:17 362:8 365:14  
 366:12,13 367:15  
 368:19 369:19,20  
 370:3 371:21 372:2,9  
**Donohue** 10:10  
**door** 4:8,11  
**doors** 4:9,17  
**DOT** 198:11  
**double** 379:16  
**double-walled** 237:17  
**doubt** 340:18  
**downstairs** 4:15,20  
**downtown** 310:18  
**dozens** 80:8  
**draft** 23:16 141:5  
 216:20 313:9 332:14  
 359:14 373:7  
**drafted** 370:5  
**drafting** 128:21  
**Drake** 1:17 8:21,22 44:6  
 46:14,15,15 54:22  
 64:9,10,11 77:7,7  
 94:22 95:1,1 98:2,5,8  
 111:21,21 120:19,20  
 120:20 132:4 133:8,9  
 133:9 142:22 143:1  
 147:2 150:5,6,6  
 174:15,15 203:14,14  
 218:1,2 263:1,2,2

267:14,15 287:4,5  
 288:6 289:20,21  
 290:22,22 295:18,21  
 302:1 312:17,18,18  
 313:1 316:12 332:2,6  
 332:10 333:14 334:10  
 334:11 352:21,21  
 353:10 354:4,7  
 365:11,11 366:17  
 374:13,14  
**Drake's** 322:4  
**dramatic** 94:17 280:8  
 308:21  
**draw** 158:8 345:14  
**drawing** 166:4  
**drawings** 166:2  
**drawn** 17:5  
**driving** 189:9 262:11  
 364:14  
**drop** 201:12  
**dry** 31:12  
**duck** 47:15,16,16,16,17  
 49:20 65:13 104:1,1,2  
 112:16 128:5,7 212:1  
 212:1  
**due** 232:18 237:21  
 311:15  
**Duke** 2:3 170:1 282:15  
 305:18 337:5 372:6  
**duplication** 273:16  
**duplicative** 259:18  
 269:19  
**duty** 379:17  
**dwarf** 70:12

## E

**e.g** 336:6  
**earlier** 84:22 85:21  
 86:20 106:5,6 118:20  
 145:6 148:8 150:15  
 162:12 168:20 171:22  
 172:12 183:4 211:22  
 213:15 253:16  
**early** 14:14 15:1 23:10  
**earth** 257:7  
**Earthjustice** 2:15 249:8  
 257:13  
**ease** 149:3  
**easier** 148:22 206:7  
 369:10  
**easily** 369:9  
**East** 376:21 377:20  
**easy** 30:6 208:21 213:9  
 369:9  
**ebb** 302:11  
**echo** 162:12  
**economist** 2:8 15:16  
**EDF** 39:18 42:2 55:15

57:7 62:15 104:9  
 109:15 116:6 122:13  
 126:11 129:12 132:7  
 138:21 159:17 160:9  
 162:7 170:18 182:9  
 185:16 200:20 213:14  
 268:15 271:19 275:6  
 279:1 286:4 288:9  
 297:9 302:19 308:9  
 320:8 322:14 325:7  
 328:7 339:3 341:19  
 342:10 345:12 355:14  
**EDF's** 56:2  
**editing** 294:20  
**EDT** 1:11  
**educate** 183:9  
**effect** 84:4 160:2 172:5  
 256:11 257:22 271:11  
 276:15 328:20  
**effective** 64:14 67:8  
 100:8 137:2,8,15,18  
 138:7,15 190:21  
 233:2 234:22 235:6  
 243:8 261:22 313:12  
 353:4,10 354:8  
 359:17 373:10  
**effectively** 107:17  
 135:18 233:1  
**effectiveness** 94:8  
 107:8 174:8 233:11  
 247:6  
**effectuate** 97:13  
**efficient** 41:16 65:4  
 121:19 208:5  
**efficiently** 70:18  
**effort** 70:15 120:22  
 162:7 183:18 195:18  
 196:13 202:1 204:11  
 204:12 258:18 341:8  
**efforts** 185:20 196:17  
 240:9 263:6,13 300:9  
 366:10  
**either** 222:10 254:12,17  
 268:6,10 322:20  
**either/or** 253:21  
**elected** 147:13  
**element** 118:13,13  
**elements** 12:22 13:14  
 55:19 328:16  
**elevation** 63:9  
**eligible** 222:12  
**eliminate** 238:1  
**eliminating** 12:2 202:17  
**elimination** 241:1  
**else's** 309:20  
**emergency** 84:12  
 147:12 154:3 157:18  
 176:22 178:8 179:20

185:1 212:4 344:17  
**emerging** 89:9  
**emission** 70:22 152:15  
 243:15 245:4 292:22  
 339:13  
**emissions** 11:19 12:1,3  
 23:13,14,17 24:2,4  
 50:11,16 51:3,9,9,19  
 51:21 52:1,7,8,14  
 53:16,21 59:13,15  
 63:16 66:22 70:8,9,20  
 82:6,9 86:6,10 93:15  
 94:4 151:21,22 152:3  
 152:11 153:4,9  
 163:15 166:21 189:16  
 196:14 220:22 224:3  
 224:15 225:4,10,21  
 227:3 231:13 232:17  
 234:12 241:5 260:14  
 265:22 266:4 288:19  
 292:14,21 299:16  
 320:22 321:21 323:19  
 325:14,17 327:19  
 331:4 332:21 338:21  
 339:6,10,16 340:13  
 341:6,11 342:4,5  
 343:1 347:10 348:13  
 353:12 358:4,7,11  
 361:20  
**emit** 51:12  
**emitting** 54:3 57:19  
**emphasis** 160:20 273:2  
**emphasize** 82:1 149:22  
 172:7  
**employ** 342:7  
**Employing** 344:13  
**enable** 105:20  
**Enbridge** 1:17 46:15  
 64:11 77:7 95:1 98:8  
 111:21 120:21 133:9  
 150:6 174:15 203:14  
 263:3 291:1 312:19  
 352:21 365:12  
**encapsulate** 200:14  
**encompassing** 42:20  
**encounter** 362:18  
**encourage** 74:20  
**encourages** 239:2  
**encouraging** 75:4  
**ended** 13:17 40:7  
 115:18 299:11  
**endorse** 346:12  
**endorses** 28:14  
**ends** 202:9  
**energy** 2:2,3,19,20  
 90:19 170:1 195:21  
 237:6 239:22 251:22  
 251:22 259:4 282:16

301:3 305:19 337:6  
 372:7 376:4  
**enforcement** 27:7  
 61:18  
**engage** 244:4 245:16  
**engagement** 173:22  
 190:4 233:6 250:15  
**Engineer** 2:6  
**engineering** 246:7  
 251:2,21  
**Engineers** 1:20 168:13  
 359:11 373:3  
**enhance** 377:13  
**enhances** 12:12  
**enjoying** 169:9  
**ensure** 5:5 58:7 73:20  
 276:15  
**ensuring** 76:13  
**entails** 311:4  
**entertain** 214:17 215:4  
**entire** 32:2,7 34:9 35:4  
 65:7 79:2,7 97:9  
 117:1,6 133:19  
 135:12  
**entirely** 105:4 172:9  
 306:15  
**entities** 195:7  
**environment** 194:19  
 228:8 243:5,8 259:17  
 354:16  
**environmental** 1:20  
 24:15 25:13 74:9  
 118:14 141:5 147:4  
 149:9 192:11 194:11  
 195:12,20 216:21  
 227:11 231:14 232:19  
 233:4,7,9 235:12  
 237:2 238:11 250:16  
 259:13 264:4 304:6  
 304:11 313:9 332:14  
 342:10 359:14 373:7  
 377:14  
**envision** 282:20  
**EPA** 15:17 16:17 23:14  
 55:4 153:1 221:5  
 226:21 227:3 228:21  
 230:11 263:5,10,17  
 264:8,15 265:2,9,18  
 265:22 269:11,21  
 270:14 272:11,17,21  
 274:1 276:5 278:1  
 282:8 288:19 313:15  
 315:16,17 317:7,12  
 318:20 320:2,22  
 321:21,22 322:9,9,19  
 322:20,21 323:19  
 324:4,7,11 325:13  
 326:11,14,14,15,18

326:20,22 327:6,19  
 327:20 328:13,16,21  
 329:4,9,13,15,15  
 331:3,9,12 332:21  
**EPA-** 323:20 325:14  
**EPA-approved** 321:1  
 322:22 324:3  
**EPA-covered** 319:10  
**EPA's** 16:7 55:10 260:2  
 264:12 272:4 325:17  
 339:7  
**equal** 12:8 33:2 141:15  
**equipment** 53:20 54:6  
 54:15 55:3 89:15  
 221:10 227:13,19  
 228:19 229:1,17,21  
 230:6,8 231:16  
 235:18 236:11,12  
 237:13 250:1,2  
 252:16 293:9 306:4  
 343:21  
**equipped** 57:11 183:22  
 246:18  
**equivalent** 193:3 241:4  
 313:16 317:11  
**Eric** 2:19 244:8  
**Erin** 1:20 9:11 26:20  
 39:17,18 42:1 53:5  
 54:20 55:13,15 62:6  
 64:12 75:2 77:6 81:8  
 88:19 104:6,9 108:1  
 109:10,14,15 116:4,6  
 117:17 122:11,13  
 124:9,21 126:10,11  
 129:8,12 132:4,7  
 138:8,19,21 143:11  
 147:2,4 154:2 159:15  
 159:17 162:5,6  
 170:17,18 182:6,9  
 185:14,16 187:19  
 194:8,9,10 198:22  
 200:19,20 213:13,14  
 217:4 218:12 264:1,4  
 268:14,15 271:17,19  
 274:11 275:5,6  
 278:21 279:1 281:19  
 282:17 286:2,4 287:5  
 288:5,8,9 289:21  
 297:7,8 302:17,18,19  
 306:20 308:7,9 318:1  
 320:7,8 321:7 322:14  
 325:1,6,7 328:4,7  
 332:3 334:21 339:2,3  
 341:17,19 345:11,12  
 346:20 355:12,14  
 375:2  
**Erin's** 46:16 132:1  
 330:1 340:17

**ERMIAS** 2:13  
**especially** 65:5,19  
 199:13 248:22 258:14  
 299:13  
**essence** 97:2  
**essential** 192:9  
**essentially** 309:21  
 325:19  
**establish** 28:17 117:1  
 136:8 280:17  
**established** 91:10  
 157:14 186:1 278:13  
 304:12  
**establishing** 119:15  
 285:7 370:12  
**estimate** 27:14 247:12  
**estimated** 16:3 18:14  
 20:14 21:21 24:3  
 27:17 160:6 247:14  
 339:6,10  
**estimates** 160:13  
 247:17  
**estimating** 20:18 247:8  
**et** 14:19,20 57:5 126:6,6  
 132:21 196:4 223:6  
 223:10 226:12 232:8  
 237:10  
**Europe** 241:15 307:12  
 307:15  
**evacuation** 345:1  
**evaluate** 28:19 81:19  
 83:20 130:8 247:5  
 342:3 364:3  
**evaluated** 16:18,20  
**evaluating** 43:16 93:16  
 248:2  
**evaluation** 329:1  
**event** 4:21 345:1  
**events** 224:17 341:7  
 377:1,5  
**eventually** 108:7  
**everybody** 3:3 35:8  
 112:20 169:15 218:21  
 256:5 257:11  
**everyone's** 206:11  
 331:20  
**evidence** 294:15  
**evolve** 89:18  
**evolving** 43:4 66:14,20  
 174:11  
**exact** 121:6  
**exactly** 45:19 49:18  
 86:5 121:14 190:15  
 197:1 357:2  
**example** 29:20 30:11  
 35:7,9 68:4 89:8  
 100:5 132:19 154:12  
 193:4 196:7 221:5

242:20 256:21 279:6  
 304:3 352:12 364:1  
**examples** 29:19 351:13  
 351:15  
**excavators** 147:12  
**exceed** 224:7 304:6  
 306:11 308:2 314:5  
 333:7  
**Excel** 184:8  
**exception** 19:4 33:3  
 44:15 103:18 170:6  
 226:19,20 265:3  
 275:18 288:15 315:1  
 315:8 316:3 318:6,7  
 318:22 320:7,13  
 321:6  
**exceptions** 269:10  
 336:6 338:3  
**excessive** 237:22  
**excited** 61:5 127:21  
 254:19  
**exciting** 89:10 121:1  
 195:17  
**exclude** 22:18 25:6  
 232:17 281:8  
**excluded** 50:12 58:5  
 156:18 165:19 166:17  
 191:18 243:22  
**excluding** 105:3 281:13  
**exclusion** 38:9,13  
 45:14 46:8 71:14 78:8  
 108:18 112:6,8 146:3  
**exclusions** 281:17  
**excrement** 256:14  
**exempting** 69:4  
**exemption** 72:5 170:12  
 259:22 313:14  
**exemptions** 106:17  
**exercise** 166:9 303:8  
**exhaustive** 169:1  
**exist** 48:20 130:18  
 152:2,17 183:11  
 201:22 203:2 204:14  
**existing** 11:20 88:22  
 128:22 171:7 222:1  
 233:10,16 236:2,16  
 245:18 251:6 271:12  
**exists** 97:13 201:19  
 202:22 303:11  
**exit** 4:10,13,14,19  
**exits** 4:7  
**expand** 82:16 213:3  
**expanded** 82:15 238:15  
**expansion** 146:14  
**expect** 86:2 178:15,16  
 245:1  
**expectation** 56:2 61:17  
 205:1

**expected** 55:22 105:1  
**expense** 202:1  
**expensive** 80:10  
**experience** 43:19 51:16  
 90:16 295:12 298:2  
**expert** 94:10 277:22  
 358:18  
**experts** 309:17  
**explain** 199:6,7 370:19  
**explaining** 206:21  
**explanation** 199:12  
 207:3  
**explanatory** 107:20  
**explicit** 146:9 167:17  
**explicitly** 25:6,8 40:14  
 165:18  
**exploring** 155:18  
 161:11 190:8,13,14  
 339:18  
**explosion** 186:17,19  
 281:5 376:22 377:21  
**export** 290:11 291:2  
 296:3 301:12 339:8  
**exported** 301:5  
**exporter** 277:17  
**exports** 301:14 307:12  
**expressed** 222:22  
 226:10,12 228:2  
 231:3 237:3  
**expressly** 276:21  
**extend** 40:20 89:2 90:9  
 90:12 95:10 102:5,9  
 111:15 115:12 124:4  
 139:18 141:9 144:22  
 145:8 161:21 167:3  
 174:5 181:8 182:4  
 192:4 197:15 199:8  
 211:20 212:8 312:12  
**extended** 23:5,8 88:4  
 112:17 113:11 137:10  
 185:4 211:12,16  
 212:15 311:10  
**extending** 37:22 43:20  
 93:17 120:4 124:10  
 127:12 128:18 169:8  
 181:22 184:3 189:7  
 198:7 202:10 209:21  
**extends** 179:13  
**extension** 116:8 303:5  
 308:21 309:4 314:6  
 333:8  
**extensive** 66:17 195:19  
**extent** 86:5,9 163:14  
 194:21 263:20 265:1  
 265:19 270:12 370:14  
**extraordinarily** 204:6  
 261:20  
**extrapolate** 45:19 46:1

341:14  
**extrapolating** 341:1  
**extremely** 120:3

## F

**F** 19:4  
**F-** 262:10  
**face** 99:2  
**facilitation** 74:20  
**facilities** 12:14,15  
 31:11 62:18 171:4  
 220:14,18,20,21  
 221:8 223:1,13,14,15  
 223:19,21,22 224:1  
 224:21 225:14 226:6  
 226:8,14,19 227:2,9  
 227:16 228:5,6,11,16  
 229:5,16,19 230:13  
 231:1 240:6,12,13,19  
 241:2 249:18,20,22  
 250:4,6,9 253:18  
 254:3 259:7,10 260:4  
 260:8,9,13 263:21,22  
 266:14 267:2,4  
 269:10,10 272:3,3,5,6  
 274:5 275:8 276:2  
 277:20 278:4,8,17,19  
 279:5,10,20,22 280:4  
 280:5,12,20 281:8  
 282:10,21 283:2,16  
 285:16 286:14,16,20  
 288:3,4,19 290:12  
 292:18 294:1,14,16  
 296:10,19 298:1  
 299:8,14,20,21  
 300:22 301:5,12,17  
 307:5,10 313:14,19  
 315:15 319:9,10,11  
 326:3 332:22 336:1,4  
 336:11 337:2,10,22  
 338:15 339:11,13,17  
 340:20 341:2 342:5  
 343:2,7,18 344:16  
 345:6,17 346:1,6,9,21  
 349:7,13,21 352:9  
 355:17,22 356:14,19  
 365:19 368:6 372:16  
**facility** 24:20 146:5  
 165:16 223:8 259:15  
 264:10 265:2,20,21  
 265:21 269:20 271:16  
 276:4,4,6 278:10  
 281:5 283:8,9 284:8  
 285:1,4 288:20,21  
 295:9,11,13 299:9  
 303:3,9 306:5,15  
 310:17 320:21 321:20  
 323:2,3,19 329:5

331:3 332:20 338:19  
 338:22 340:13,17  
 341:13 344:1,6,13  
 346:12 347:2,3 349:5  
 349:16,17 352:14,16  
 354:20 361:19 362:10  
 362:18 367:1 369:7  
 369:12,21  
**facing** 94:17  
**fact** 27:6 41:15 47:2  
 62:16 107:19 117:8  
 167:18 177:6,7  
 196:17 205:22 213:19  
 262:5 274:1,15  
 294:15 311:5 339:15  
 345:14  
**factor** 23:18 24:4  
 300:21  
**factors** 23:15 76:20  
 106:14  
**Fahrenheit** 365:20  
**failed** 207:17  
**failure** 218:20 250:2  
**fair** 301:18  
**fairly** 284:4  
**faith** 114:6  
**fall** 273:18 308:16,19  
**falling** 273:7  
**falls** 266:5  
**familiar** 30:3  
**familiarity** 356:19  
**fantastic** 85:9  
**far** 71:11 125:17 198:18  
 245:13 253:15 282:21  
 283:4 284:11 337:9  
**farther** 169:11  
**fashion** 110:11  
**fast** 75:4 134:4 314:22  
**feasibility** 171:10  
 360:15  
**feasible** 67:5 141:7  
 172:9 210:21 217:1  
 232:21 298:17 307:20  
 313:11 332:16 359:16  
 372:11,16 373:9  
**federal** 2:2 3:16,17  
 11:18 23:1 62:7 75:15  
 88:1 119:5 141:3  
 163:3 180:5 189:13  
 216:18 238:19 250:18  
 259:14 273:10 275:13  
 275:19 313:7 318:8  
 321:1 322:1,20  
 323:21 325:15 328:17  
 329:17 330:4,5,9,11  
 332:12 359:12 373:5  
 377:8  
**federalism** 318:11

**feed** 282:21  
**feedback** 263:17  
**feeding** 283:2,8  
**feel** 29:17 61:21 106:2  
 113:18 161:13 163:5  
 170:21 188:4 193:12  
 199:9 275:10 290:15  
 306:13 308:20 315:3  
 318:3 325:4 370:17  
 377:7 378:14  
**feeling** 107:1 201:1  
**feels** 60:11,22 62:2  
 118:10,17 119:8  
 132:11 214:5,9 282:4  
 286:6,22 338:17  
**feet** 47:4 224:8 229:2  
 293:3  
**felt** 43:22 201:2 212:16  
 320:14 360:7  
**fenceline** 294:7  
**FERC** 125:1 134:15  
 356:7  
**field** 80:8 105:11  
 242:22  
**fifth** 346:3  
**figure** 32:12 38:21 66:4  
 72:7,8 76:5 79:16  
 95:3 98:15 99:7 102:8  
 117:4 186:11 196:21  
 204:13 304:1 319:18  
 347:13 353:15 354:13  
 355:1  
**figured** 75:20  
**figures** 15:19 16:7,9,14  
 16:17 17:8 68:2  
**figuring** 78:20 356:22  
**file** 137:17 149:15  
**filed** 149:10 160:9  
**filing** 333:9  
**fill** 92:11  
**filled** 258:13  
**fills** 223:11  
**final** 20:7 60:10,21  
 61:10 159:18 178:2  
 194:12 223:17 225:13  
 227:20 232:16 245:19  
 265:9 352:18 358:6  
**finalize** 104:14 290:5  
**finalized** 15:18 325:17  
**finally** 20:9 25:14 26:3  
 233:9 240:21 241:2  
 262:1 336:2  
**find** 51:18,21,22 60:13  
 60:18 65:9 74:21 79:9  
 97:12 153:9 196:3  
 311:8,12  
**finding** 70:13 213:10  
 261:17

**finds** 67:7,10 327:18  
**fine** 112:12 190:5 295:1  
 296:9 306:11 311:20  
 318:20,22 337:14  
 371:19  
**fingerprint** 47:21  
**finish** 14:13,22 15:4,5  
 100:12  
**FIP** 328:18  
**fire** 4:7  
**firm** 253:12  
**first** 11:11 21:1 22:8  
 35:20 40:21 41:19  
 45:13,18 51:17 53:5  
 73:2 90:13,15 96:15  
 110:7 115:13 123:13  
 124:1,4,18 126:16  
 129:22 132:4 135:6  
 139:9,10,17 141:21  
 160:8 179:18 186:21  
 190:16 197:14 198:21  
 205:18 215:3 223:13  
 253:5,10 256:20  
 257:21 275:8 288:11  
 293:16 305:17 316:8  
 316:18 320:19 321:11  
 321:13 323:8 365:6  
 371:17 372:7,19,20  
 373:4  
**fit** 41:19 204:13 223:3  
 263:7,12 350:7  
 356:15  
**fits** 75:8 129:5 191:8  
**fitting** 225:7  
**fittings** 343:20  
**five** 80:19 84:7 91:17  
 100:7,20,21 103:16  
 110:6,9,12 111:15  
 116:19 118:22 128:10  
 131:9 133:7 134:2,7  
 134:20 135:2,16  
 137:3,8,17 170:11  
 172:17 342:2 345:15  
 345:19 346:7  
**five-** 118:16 131:16  
 134:17 135:14 141:20  
**five-year** 108:4 115:16  
 116:15 120:8 130:1  
 130:12,16 131:3  
 134:19 135:3 138:6  
**fix** 51:19 60:14,18 257:3  
 257:9  
**fixed** 63:11 85:8 153:11  
 253:16,17,22 305:7  
**fixed-wing** 63:10  
**fixing** 85:12  
**flag** 83:22 85:1 159:18  
 195:6 245:11 275:22

**flammable** 221:18  
**flare** 340:12 343:20  
**flares** 225:1  
**flaring** 54:4 340:12  
**flawed** 199:9  
**flexibilities** 105:20  
**flexibility** 104:17  
 199:19 224:18 277:4  
 280:2 342:17,19  
 343:3  
**flexible** 14:13 235:4  
 356:2  
**flight** 64:20  
**flights** 57:13 66:1  
**floor** 5:11 201:12  
**flow** 230:3 255:15  
 302:11  
**fluid** 154:14  
**fly** 30:7 63:5,8,10 65:2  
 66:1 130:19 133:19  
 172:20 286:7 320:9  
**flying** 57:16 63:14,17  
 65:1,7 70:5,10 79:2,7  
 97:9 120:8 121:19  
 133:13 136:1,5  
 152:14 219:13  
**flyover** 57:1 74:6 133:3  
**flyovers** 56:5 57:20  
 133:1  
**focus** 37:9 45:18 46:3  
 103:20 107:4 184:20  
 185:2 245:3 268:6  
 278:18 280:7  
**focused** 66:12 151:5  
 157:7 278:8 295:14  
 350:6 355:17 377:22  
**focuses** 32:22 184:22  
**focusing** 46:6 189:13  
 248:16  
**folks** 105:11 114:20  
 126:21 138:11 158:20  
 160:18 162:9 178:7  
 185:19 193:14 202:22  
 203:1 206:3 213:16  
 264:7 280:16 305:3,8  
 308:17 360:16  
**follow** 6:17 274:1  
 281:22 282:17 283:3  
 296:18 313:12 330:1  
**follow-on** 42:22  
**follow-up** 41:21,22  
 58:11 156:7 187:19  
 211:6 230:4 266:8  
 271:4  
**following** 13:4 37:20  
 128:21 141:9 171:14  
 226:1 230:1 266:16  
 298:18 314:3,7

332:18 359:17 373:10  
**follows** 226:9 237:1  
**font** 24:8  
**footprint** 35:3 47:21  
**force** 3:12 354:13  
**forced** 208:9  
**forcing** 167:4  
**forever** 134:19  
**form** 228:9  
**formats** 213:19  
**formed** 166:18  
**forms** 238:21  
**forth** 65:2,2 129:20  
 210:11  
**Fortune** 87:12  
**forward** 11:13 14:4,9  
 55:17 65:12 73:18  
 75:13 76:4,14 81:15  
 86:13 174:2 192:2  
 202:4 297:21 316:5  
 316:16,17 379:21  
**forwards** 107:2  
**found** 21:13 70:7 85:8  
 161:4 187:1 196:14  
 227:22  
**foundation** 275:14,15  
 275:19  
**foundational** 147:20  
 148:18  
**four** 110:19 118:4 133:2  
 170:11 253:2,4 286:9  
 345:19 369:16 372:8  
**fourth** 51:20 314:8  
 345:22  
**fraction** 51:14  
**fracturing** 82:15 154:13  
 154:18  
**framed** 320:12  
**framework** 76:9 122:17  
 318:19  
**frameworks** 90:11  
 317:18 319:17  
**frankly** 43:10 46:5  
 117:2 120:3 156:15  
 166:17 179:16 188:22  
 307:10 370:18  
**freedom** 121:9  
**frequencies** 12:21 26:1  
 111:14 122:18 124:12  
 278:12 281:22 285:8  
 286:8 289:13 300:15  
 313:19 333:1  
**frequency** 23:12 69:10  
 80:14 93:6 100:4,19  
 101:20 104:20 108:2  
 108:4 109:19 110:3  
 110:18 111:6,7  
 112:13,18 113:12

115:17 116:11,14,16  
 117:22 118:2,17  
 122:5 123:2,13  
 125:12 127:16 129:18  
 132:13 139:1 177:11  
 192:22 234:15 284:18  
 285:4,6 288:2 289:3,4  
 289:17 291:17 298:5  
**frequent** 80:16,17  
 118:19 119:6 134:21  
 229:10  
**frequently** 132:17  
 133:6 262:4 284:22  
**fresh** 196:6  
**Friday** 13:15 17:22  
**Fridays** 10:19  
**friendly** 123:22 126:17  
 139:13 140:11 316:6  
 318:4 322:3 331:22  
 332:1,2  
**friends** 268:13  
**front** 4:3 5:1 10:9 118:3  
 139:11 263:6 350:3  
 358:22 371:9  
**fruit** 346:17  
**fruitful** 113:19  
**fuel** 343:21  
**fulfilling** 42:8  
**full** 3:11 42:14 44:2  
 81:16 108:14 137:1  
 223:7 231:4 378:1  
**fully** 60:21 61:7,12  
 72:16 80:6 86:15  
 108:8 161:7,19 169:1  
 190:12,14 214:1  
**function** 303:9  
**functionality** 367:4  
**Fund** 1:20 147:5 194:11  
 264:5  
**fundamental** 303:10  
**fundamentally** 365:16  
**funded** 152:19  
**funding** 152:22 153:2  
 195:19  
**further** 83:1 102:9  
 106:2 111:5 122:15  
 129:7 167:19 209:16  
 216:11,13 243:10,20  
 261:13 278:21 290:5  
 320:15 342:14 357:13  
 358:13  
**Furthermore** 259:21  
**future** 43:1 81:19 83:20  
 93:19 107:5,7 235:7  
 250:14 251:13 258:8

---

**G**


---

**gain** 146:18 278:16

**Gale** 2:7 10:7 11:2,5  
 17:12 26:5 29:11  
 144:6,7,18 219:21  
 239:11 268:4 335:12  
 335:18 336:17,19  
**gallon** 369:4  
**gap** 152:6 223:11  
**gaps** 152:9 258:10,12  
**gas** 1:5,17 2:3,17,17 3:7  
 7:9 11:11,20 12:4,12  
 12:13,13,14 14:16  
 15:19 18:8,11,14,20  
 19:7 20:7,21,21 23:16  
 23:21 24:2,4,9,20,21  
 26:4 27:3 30:1 31:12  
 32:8 54:4,10 56:1,4  
 61:8 82:3,13 84:5  
 87:22 133:2 139:16  
 140:6 141:6 144:1,9  
 144:13 148:4 149:7  
 154:14 155:15 172:2  
 187:14 188:8 219:18  
 220:13,16,18,19  
 221:20,20,21 222:11  
 222:11,16 223:14,20  
 224:1 225:22 226:5  
 230:2,10,22 231:13  
 231:17,19 232:14,17  
 233:19,21 234:2,4,9  
 234:16,18 236:19,22  
 238:5,6,14 239:1,1,2  
 241:12 243:1 245:8  
 245:18 246:8,9,18  
 247:7,20 248:20  
 250:21 251:6,21  
 252:3,5,21,22 253:22  
 254:22 255:10 257:20  
 260:1 261:2 265:10  
 270:19 279:12 280:10  
 289:14 290:2 301:1  
 313:10,17,21 314:2  
 314:10 332:16 333:2  
 333:5,12 336:5 338:1  
 338:13 339:7 342:8  
 343:18,21 344:5,6,11  
 346:4 347:3,12  
 349:17 354:14 357:1  
 365:21,21 366:21  
 367:3,6 376:6  
**gas-causing** 234:13  
**gases** 17:9 221:19  
 232:12 256:12  
**gate** 266:1  
**gather** 31:5 32:8 122:7  
 134:8  
**gatherers** 37:4  
**gathering** 11:11 12:13  
 13:16 14:9,14,17

- 17:15,19,20 18:5,8,11  
18:14,20 19:3,7,9,12  
19:15,17,18 20:7,10  
20:11,16,19,21 21:4,7  
22:6,10,12 23:3,4,9  
23:14,19 24:2,9,13,14  
24:21 25:9,11,16,20  
25:22 26:2,4 27:3  
28:20 30:16,21,22  
31:4,6,13,16 32:3,14  
32:21 33:13 34:1,9  
35:1,16,17 36:3,22  
37:1,18 38:22 39:2,10  
40:22 42:8,12 43:5,8  
45:2,18 46:20 47:6  
50:17,21 51:1,4,8,10  
51:12,14 52:1,9,22  
53:14,15,21 54:7 56:1  
56:5,9,13,17 57:14  
58:2,4,8 59:7,11,15  
59:19 60:2,17,20 61:8  
61:9,10 63:13,18 65:6  
65:14,21 66:17,22  
68:21 71:1,22 81:17  
81:21 82:4,13 83:18  
84:3,6,14 85:4,22  
87:9,22 90:9 93:3  
95:11,13,13 104:12  
105:6 108:21 110:1  
110:17 115:15 116:3  
118:1 120:10 123:12  
124:1,2,5 127:18  
130:20 133:2 135:11  
138:22 139:16 140:6  
141:6,12,14,20 144:1  
144:10,13,15 145:8  
146:6,8,19 148:4,8,20  
149:8,12,14 150:3  
151:18,21 153:17  
155:15 158:2,11  
160:2,7,13,19 161:1  
162:17 165:17 167:4  
168:6 170:6 171:2,16  
171:18 172:2,14,16  
173:4 175:11 177:8  
179:7,10,12,14 180:3  
181:9,14,22 182:17  
183:6,11,21 184:20  
184:22 185:2 186:1,8  
187:14 189:5,7  
191:18,20 192:4  
193:9 194:14 197:16  
204:8 205:16 208:18  
209:7,17 210:6  
211:10,18 212:10,15  
217:1 260:1 270:20  
308:13  
**gatherings** 30:19 33:22
- gears** 48:9 231:9  
**general** 2:6 14:16 31:13  
93:7 94:1 222:19  
223:9 226:10,12  
231:10 232:1,8  
237:10 238:7 291:19  
300:16 301:21 358:17  
**generally** 22:6 24:19  
30:4 36:12 37:2 46:3  
137:17 145:7 162:17  
220:10,20 221:18  
236:20 256:6 267:3  
269:17 286:9 300:12  
**generate** 70:10 184:14  
**generated** 70:8  
**geographic** 56:19  
**geographical** 24:5  
**geographies** 41:18  
**geography** 63:7  
**geospatial** 25:12  
153:17 154:15 164:22  
165:17 166:5 171:12  
177:14 180:2 183:14  
188:1 189:12 193:5  
202:20 206:22 210:20  
**Gerard** 47:14  
**getting** 36:4 45:3 47:4  
61:21 71:6 88:14  
127:15 129:8 130:15  
293:11 317:6 326:9  
331:8 354:11 371:11  
372:1,18  
**giant** 309:21  
**Gilbert** 1:18 9:6,7 143:6  
143:7 208:12,13  
210:1,4 212:20 218:7  
218:8 334:16,17  
374:19,20  
**GIS** 159:6 162:13  
171:13 183:15 184:11  
184:12 186:3,6  
187:20 188:1,11  
**GIS-ing** 214:2  
**give** 11:9 17:18 32:3  
34:17 50:10 63:4  
72:18 89:8 107:5,10  
110:21 112:10 115:3  
116:20 126:3 164:7  
169:14 172:19 178:6  
197:17 206:8 214:19  
235:22 239:18 285:18  
302:10 315:10 353:8  
354:12 379:5  
**given** 17:1,7 81:2 83:8  
105:13 109:2 139:17  
172:16 203:21 243:11  
243:18 258:9 348:7  
357:10 378:4
- gives** 24:12 174:10  
208:20  
**giving** 76:9,10 355:3  
**go** 4:6,10,14,16,17,19  
5:4 8:8 11:12 16:13  
17:15 19:14 29:21  
32:9 33:11,21 34:15  
36:10 39:6 42:2,21  
76:4 78:10 88:16  
92:15 94:10 95:8  
107:3 112:22 119:21  
120:17 122:1 129:19  
146:16 151:16 152:10  
166:7,15 169:20  
170:14 185:8 188:12  
197:10 200:16 203:2  
206:9 208:21 216:16  
220:7 239:9 254:3,10  
265:14 267:8 275:15  
282:21 288:12 296:7  
296:22 297:7 298:12  
305:17 306:14 309:12  
311:4 316:16 324:18  
326:7 327:4 335:14  
335:17 336:15,17  
337:17,19 347:1  
351:11 354:13 362:5  
362:21 365:8 368:16  
371:2 375:18  
**go-** 299:3  
**go-round** 300:12,14  
**goal** 41:13,18 94:11  
95:15 98:13,13  
240:22  
**goes** 4:11,15,19 183:3  
191:16 205:2 207:4,6  
209:16 293:5  
**going** 11:8 14:6,10 15:2  
15:9 17:14,15,17 18:3  
18:12 19:13 26:13  
29:21 30:13 44:12,14  
48:12,18 49:6 50:5,6  
53:10,22 55:9 58:19  
61:7 64:4 67:9,20  
74:6 75:15 78:1,3  
79:3,3,9,16 91:1 92:6  
97:12 99:20 100:11  
102:5 106:1 108:7  
109:17 111:11 114:12  
114:21,21 115:3  
120:9 121:18 126:7,9  
127:22 130:13 131:2  
132:20 133:13,18,20  
134:19 135:15 136:7  
136:19 137:14 139:18  
140:16 143:20 151:14  
153:7 157:2,3 161:22  
166:13 174:6 175:13
- 178:17 180:18 189:8  
192:2 193:18 195:13  
195:21,22 196:2  
197:8 198:16 201:16  
202:7,14,15 203:10  
205:11,17 208:4,9  
210:11,21 213:10  
214:8 216:5,6 219:3  
219:15,17,19,22  
220:5 242:11 247:19  
253:8 255:11 256:12  
256:17 266:13,18,19  
270:13 271:7 273:22  
278:11 281:14 283:2  
283:8 285:20 287:1  
290:15,20 293:12  
294:8 302:7 303:8  
310:20 317:2 318:16  
323:12 324:1 330:3,4  
335:10 336:15 347:2  
355:15 362:5,17  
364:10 365:22 366:1  
372:14 376:8,9 379:6  
380:2  
**golfer** 219:21  
**good** 3:5,6 7:4 11:4,4  
44:3 77:13 91:10  
111:18 114:6,11  
166:10 180:15 198:2  
202:21 206:21 207:9  
208:15 210:12 212:7  
220:3 241:8 246:6  
251:19 258:20 276:21  
287:8 289:1 309:16  
312:20 313:3,3,4  
331:15 351:14 357:11  
**goodness** 64:10  
**Gosman** 1:19 9:13,14  
44:6,7,19 67:16,17  
92:19,21 111:3 113:8  
127:20 136:13,17,20  
137:20 138:4 143:13  
143:14 153:14,15  
162:5 163:19,20  
168:13 176:11,12  
191:12 192:6,7  
216:15,16 218:14,15  
266:10,11 267:9,13  
274:11,12 290:9,19  
296:8 297:1,11  
303:17 306:9 311:1  
314:14,16,18,21  
315:13,20 316:1  
318:2 329:22 335:1,2  
347:19 351:18 352:2  
358:2 361:3 367:11  
368:1,3 371:13,14  
375:4,5

**Gosman's** 359:5  
**gotten** 49:3 75:20 82:17  
 137:1 356:8  
**governed** 274:5  
**governing** 270:1  
 271:10,15  
**government** 159:1  
 176:22 187:8 204:22  
 318:8 330:4  
**governments** 187:2,3  
**GPAC** 3:18 12:16 18:9  
 26:1 42:11 59:8 83:19  
 94:9 160:19 212:11  
 236:17 238:3 314:1  
 314:10 333:4,11  
 338:1 376:10 378:6  
 379:11  
**GPAC-** 126:18  
**GPAC-recommended**  
 141:10,11  
**GPAC's** 336:4  
**GPS** 172:20 175:15  
**Grade** 222:9,10,11  
 237:4,7,9 249:3  
 252:12 255:4,7  
 258:12 296:18 297:3  
 304:4 308:11,12,22  
 309:4 311:14 312:13  
 312:14,15 314:3,4  
 333:5,6  
**grading** 12:6 13:1,15  
 18:21 222:7 236:21  
 237:11,14 238:4  
 255:10 312:8  
**granted** 372:9  
**grapple** 191:7 304:21  
**grappling** 189:20  
**gravity** 243:5  
**great** 11:14 60:3 89:10  
 98:9 122:4 151:20  
 152:10 379:19  
**greater** 12:8 20:2,4,8  
 33:1,2 38:4 104:3  
 115:13 116:13 118:11  
 141:14 252:8  
**greatest** 70:2,16 71:8  
 90:13 157:9  
**greenhouse** 15:19 17:9  
 23:16,21 24:4 54:10  
 234:13 256:12 257:19  
 339:7  
**grid** 2:18 121:18 258:21  
**ground** 58:12 74:4 76:6  
 166:6 169:4 172:15  
 174:10 355:11  
**Groundhog** 11:8  
**group** 108:5 123:14,14  
 234:20 235:12 237:3

255:21 268:12  
**grouped** 13:20 56:22  
**groups** 228:9 231:15  
 233:5,10 238:12  
**guess** 17:3 45:20 87:14  
 103:12 107:14 122:15  
 145:11 155:11 158:9  
 177:17 182:9 268:16  
 273:3 275:17 279:6  
 288:10 297:9 298:3  
 302:21 303:17 320:18  
 323:22 325:2 326:8  
 327:3 342:22 360:13  
 365:6  
**guidance** 15:20 17:7  
 95:14 96:7 126:4  
 203:18,22 287:8  
**guidelines** 274:2  
 325:18  
**Gulf** 241:19 260:20  
 284:7  
**guys** 13:8 241:9

## H

**hadn't** 107:15  
**Hail** 111:4  
**half** 84:17 125:17 281:6  
 376:15  
**hand** 6:22 83:5 219:22  
**hand-drawn** 166:1,4  
**handful** 301:5  
**handheld** 58:13 230:5,8  
 240:15 243:2,7 306:3  
**handle** 65:18 75:9  
 267:21  
**handling** 75:22  
**hands** 318:17  
**hang** 317:21  
**happen** 50:1 97:15  
 110:12 117:6 120:6  
 329:10  
**happening** 172:8  
 194:21 202:19 326:22  
**happens** 71:2  
**happy** 10:3 90:5 117:18  
 206:20 207:11 288:8  
 317:19 349:10,14  
**hard** 10:13 101:7  
 127:17 153:7,12  
 372:15  
**harder** 293:12  
**harken** 47:14  
**Harlem** 376:22 377:21  
**hasn't** 133:15 165:21  
 170:12 262:2  
**haven't** 3:10 30:14 49:3  
 80:12 85:18 88:5  
 105:10 108:1 122:20

264:7 293:18 294:12  
**hazard** 229:6  
**hazardous** 1:3 22:16  
 158:5 246:20 254:9  
**hazards** 24:15 246:21  
**HCA** 285:21  
**HCAs** 77:22 308:14  
**head** 290:10 315:9  
**healthy** 77:14  
**hear** 42:6 75:3 91:13  
 109:9 126:13 133:4  
 148:15 157:14 162:16  
 176:5,6 207:13  
 305:22 349:3 361:14  
 369:15  
**heard** 40:12 44:21  
 72:15,19 105:10  
 110:6 159:10 160:17  
 198:13 200:19 241:21  
 253:15 256:9,15,16  
 264:8 269:17 277:18  
 282:6 348:21 351:9  
 358:19 367:14  
**hearing** 71:10 74:13  
 76:11,14 77:1 105:9  
 118:9 123:21 155:20  
 161:15 167:1 173:18  
 175:9,18 190:6 198:4  
 198:17 202:22 205:13  
 279:6 286:19 287:19  
 288:4 324:6 355:18  
 363:8 368:14  
**hearken** 168:19  
**hearkening** 150:14  
**heart** 173:13  
**heavy** 150:22 151:7  
**height** 63:11  
**held** 12:17  
**helicopter** 56:7 63:9,15  
 63:17 70:6,10  
**Hello** 15:15 255:19  
 260:16  
**help** 5:5 14:4 74:22  
 98:18 112:21 128:9  
 134:16 137:7 158:12  
 161:13 169:6 190:6  
 193:6 209:10 213:4,8  
 216:7 250:3 251:12  
 289:7  
**helped** 95:5 112:1  
 341:10  
**helpful** 26:22 29:8  
 41:12 55:16 68:3 77:2  
 78:19 81:11 117:20  
 127:1 155:10,19  
 161:5,16 168:22  
 173:21 174:12 190:9  
 196:7 215:17,20

268:22 331:15 341:20  
**helpfully** 148:7  
**helping** 75:7 190:21  
**helps** 169:3  
**Here's** 98:14,14 152:15  
**hey** 152:14 379:1  
**Hi** 7:4 245:7 252:20  
 257:16  
**hiding** 187:9  
**high** 19:20,22 57:19  
 182:12,21 292:19  
 293:3,8 303:22  
 361:12  
**high-** 20:7  
**high-level** 247:12  
**high-pressure** 35:16  
**high-stress** 158:7  
**high-tech** 184:7  
**higher** 16:22 22:10  
 23:11,12 24:3 53:12  
 86:12 211:14 284:20  
**higher-level** 163:12  
**highest** 175:15  
**highlight** 120:5 363:21  
**highlighted** 258:11  
**Highway** 1:10  
**hire** 189:11  
**historically** 213:17  
**history** 194:2 377:21  
**hit** 133:11 174:22  
**hold** 5:10 243:13  
 315:20 317:20  
**holding** 97:5  
**hole** 324:19  
**holistic** 76:21  
**holistically** 231:17  
 235:13  
**home** 256:13  
**homes** 252:7  
**honest** 66:7 134:5  
 256:20  
**Honorable** 3:21  
**hoop** 20:1  
**hope** 41:12 60:4 172:6  
 245:20 272:13 291:18  
 307:6 317:4  
**hopeful** 14:6  
**hopefully** 3:12 15:6  
 89:19 110:22 149:3  
 157:19 159:19 276:10  
 355:19  
**hoping** 29:14 127:14  
 136:15 219:13 355:10  
 379:4  
**hot** 92:15  
**hotel** 1:10 4:22 5:1  
 92:11  
**hour** 52:10,11 59:10

67:7 123:18 124:14  
 230:3 293:14 298:3  
 298:20 300:14 306:5  
**housekeeping** 5:5 6:21  
**Houston** 257:1,6  
**huge** 55:5 175:19  
 190:19 250:19  
**human** 38:6 141:17  
**hundreds** 31:3 57:19  
 280:11  
**hurdle** 88:9 175:6  
**hurry** 300:9  
**hurt** 281:10  
**hydraulic** 82:15 154:13  
 154:17  
**hydrogen** 13:20 14:18  
 219:18 220:7 221:15  
 221:16,20,21 222:1,3  
 222:6,9,16 231:11,13  
 231:15,17,19,22  
 232:2,3,7,12,17,21  
 233:4,6,12,16,21  
 234:2,4,7,8,10,18  
 235:2,8,11,13,15,18  
 235:19 236:4,5,8,10  
 236:11,15,22 237:4  
 237:12,12,20 238:2  
 238:14 239:1 241:13  
 241:14,17,22 242:2,4  
 242:8,9,12,14,17,21  
 243:2,3,5,11,13,17,20  
 243:22 244:22 245:14  
 245:17 247:20,21,22  
 248:14,17,20 249:1,4  
 250:10,12,20 251:3,6  
 252:1,3,3,5,11,11,14  
 252:16 254:18,20,21  
 255:7,13 257:18,18  
 258:7,14,16 260:20  
 260:22 261:6,11,20  
 262:17 267:17,18  
 268:6 375:12 380:4  
**hydrogen-related**  
 243:19  
**hydrogen-specific**  
 231:18 232:9  
**hydrogen's** 250:15  
**hydrostatic** 79:18

## I

**I'll** 4:6 5:4 9:21 19:14  
 24:11 33:12 84:22  
 89:8 91:14 107:9  
 117:19 128:14 140:22  
 142:8 158:1 169:22  
 187:18 217:9 302:17  
 305:19 332:9 333:17  
 370:1

**I'm** 3:14,17 7:5 10:3  
 11:5,8 15:16 17:16  
 18:3 26:13 29:21  
 39:19 42:4,6 43:22  
 44:16,17,21 45:2,10  
 45:18 46:6,17 49:8  
 54:20 58:18 61:5 69:1  
 71:10,18,18 72:15  
 74:4,12 76:1,5,22  
 77:1 81:13 90:5 97:11  
 102:15 103:19 105:8  
 105:22 106:18 110:15  
 110:20 111:18 113:5  
 114:2 115:3 118:18  
 118:19 121:8 122:15  
 123:7,21 127:21  
 129:8,13,20 131:20  
 132:18 134:16 136:15  
 137:13 139:22 140:16  
 144:21 150:13 151:14  
 153:16 155:19,20  
 156:8 158:7,9 161:11  
 161:15 167:1,15,15  
 167:15 168:17 169:5  
 169:9,18 170:7,11,13  
 172:14 173:17 174:11  
 174:17,21 175:9,18  
 182:10,13,19 184:16  
 185:5,12,17 189:20  
 190:5,7,22 193:2  
 198:4,4 199:1,16  
 201:1,16 202:21  
 204:16 205:4,5,13,17  
 206:20 207:11 215:12  
 216:11,11,12 219:19  
 219:22 220:4 241:9  
 246:7 249:8 251:20  
 252:20 255:20,21,22  
 256:1 264:5 271:20  
 277:22 278:6,15  
 279:6 280:18 281:17  
 281:20 284:16 287:14  
 287:19,21 288:4,8  
 290:9,11 291:11  
 292:12 297:9,13  
 298:1,14 300:4,10  
 302:19 304:17,20  
 306:17 309:16 311:20  
 311:21 314:16 315:1  
 315:8,9,17 317:1,3  
 322:14 323:11,22  
 325:3,3 326:9 327:3,8  
 328:11 337:14 341:13  
 346:16 349:8,11  
 354:10 355:3,5,10,18  
 357:8,9 358:6 360:3,7  
 360:17,19,19 361:11  
 362:12 363:8,13

366:12 368:14,21  
 371:1,5 372:7,11  
 376:8,9 377:1 378:7  
**I've** 29:19,20 38:10  
 44:21 53:17 80:8  
 105:11 151:15 164:10  
 194:12 196:5 198:12  
 198:17 200:19 208:14  
 356:8 376:14  
**idea** 14:12,16 32:3  
 42:21 50:10 71:18  
 101:6 103:6 104:2  
 105:9 117:10 127:9  
 133:5 176:13 207:9  
 298:4 300:13 315:5  
 346:1 379:5  
**ideally** 57:1  
**ideas** 346:20  
**identified** 21:3 22:12  
 23:10 38:7 57:19 58:6  
 58:8 85:18 101:22  
 106:7 141:18 196:11  
 196:22 247:13  
**identifies** 22:5 97:20  
**identify** 5:13 57:3 70:1  
 230:15 234:6 238:22  
 250:3 273:17 285:22  
 354:6,7 355:6  
**identifying** 85:11 195:8  
 275:18  
**idle** 135:16  
**ignorant** 158:10  
**illustration** 27:19  
**imaging** 57:12 230:11  
**immediate** 296:17  
 297:2 299:19 305:9  
 308:11 314:3 333:6  
**immediately** 254:1  
 305:4,8  
**immense** 10:2  
**impact** 16:4 33:5 70:16  
 71:8 82:18 84:1 141:4  
 141:19 157:9 189:15  
 195:13 216:20 247:4  
 299:9 313:8 332:14  
 359:13 373:6  
**impacted** 20:14 64:5  
 246:16 249:2  
**impactful** 338:12  
**impacts** 84:13 304:5,11  
**imperative** 252:10  
**imperiled** 257:8  
**implement** 12:5 228:4  
 233:1  
**implementable** 126:6  
**implementation** 71:17  
 73:21 106:3,12,20  
 108:20 109:2 125:19

126:1 139:4 271:2  
 322:22 323:1 328:15  
 328:17,20 329:13,16  
 329:17 330:3,5,7,9  
**implemented** 167:2  
 171:22 183:16  
**implementing** 105:16  
 132:14 231:4 329:13  
**implications** 190:20  
**implicit** 275:12  
**implies** 262:6 347:21  
 361:18  
**imply** 167:11 348:4  
**import** 339:8  
**importance** 59:19,20  
 60:6 86:13 149:11  
 153:18 259:7 295:15  
**important** 55:1,8 59:4  
 63:1 64:13 68:7,16  
 75:19 76:12 87:15  
 89:22 93:21 94:11  
 95:14,20 98:12  
 104:10 117:3 123:4  
 147:7 164:18 167:10  
 167:18 174:3,20  
 177:16 178:12 179:6  
 187:12 193:9 195:17  
 207:1 214:6 242:6,13  
 242:18 245:11 251:12  
 252:15 253:8 274:9  
 276:19 291:18,21  
 292:1,16 295:7,10  
 299:14 300:18 306:12  
 307:10,16 315:4  
 318:13 319:21,22  
 346:5 357:6 370:18  
 370:20 376:19 377:2  
 378:21  
**importantly** 74:2 93:2  
**imposition** 100:15  
**impossible** 133:5,22,22  
**impracticable** 307:20  
 312:15  
**impression** 186:10  
**improve** 160:16 195:18  
 377:11  
**improved** 342:14  
**improvement** 163:13  
 213:21 377:6  
**improves** 181:20  
**improving** 166:22  
 189:16 194:19 207:6  
 378:18  
**in-service** 171:19  
**inability** 63:10  
**inadequate** 230:20  
**incentivizing** 250:19  
**inch** 33:3 38:4,5,5 41:7

115:14  
**inches** 20:9 23:5 104:3  
 104:4 116:13 141:15  
 141:16,16  
**incident** 84:13,15,18,20  
 188:7  
**incidents** 84:2,5,7,8,10  
 86:10 149:16 181:14  
**include** 22:5 39:10 87:7  
 127:18 134:10 138:2  
 145:18,19 149:12  
 198:18 205:15 209:18  
 223:22 229:17 248:14  
 259:22 266:22 272:3  
 276:9  
**included** 27:14,19 33:6  
 40:11,15 50:20 53:1  
 60:21 102:7 173:3  
 214:6 216:9 265:11  
 270:3 276:21 339:5  
**includes** 24:21 93:5  
 171:14,15 209:14,17  
 220:18 241:17 259:1  
 325:16  
**including** 15:21 40:22  
 58:7 59:19 82:4,22  
 130:21 141:10 147:11  
 160:2 171:2 194:13  
 212:9 221:20 233:16  
 236:16 241:15 321:1  
 321:22 323:20 339:17  
 371:17 373:12  
**inclusion** 78:8 81:16  
 149:7 210:14  
**inconsistent** 259:19  
**incorporate** 56:17  
 177:1 199:3,12  
 377:14  
**incorporated** 190:10  
**increase** 17:1 233:5  
**increasing** 166:19  
**incredible** 180:21  
**incredibly** 175:10 204:8  
 249:19 301:7  
**indicate** 128:6  
**indicated** 247:4  
**indicates** 86:13  
**indicating** 261:9  
**indication** 260:12  
**indications** 172:21  
 230:5  
**indirect** 257:19  
**individual** 52:9 228:10  
 238:12 303:6  
**individuals** 207:17  
**industrial** 241:12  
**industry** 37:2,3 40:1  
 46:21 54:7 61:2,6,9

61:11,14 68:1 82:8  
 85:16 87:11 94:9  
 101:9 104:18,22  
 113:1 117:1,2 119:18  
 119:19 133:15,19  
 134:4,9 136:8 153:19  
 160:11,18 165:20  
 166:3,10,11 167:5  
 183:7,14 188:5,7,9  
 189:2 192:22 193:1  
 196:20 197:4 213:4  
 221:6 222:21 224:5  
 224:13,19 225:5,8  
 226:17 227:6,9  
 228:19 229:10 230:14  
 230:20 231:2,18,21  
 232:15 234:20 236:2  
 236:3 237:2 239:3  
 240:3,7 241:4 247:15  
 248:1 253:13 255:3  
 255:21 256:10,11  
 261:4 309:17  
**industry-wide** 341:7  
**industry's** 248:18  
 256:16  
**infinity** 83:2  
**influence** 96:3  
**info** 202:20  
**inform** 171:2  
**information** 15:10  
 18:13 22:8 23:20  
 28:12,17 52:16 59:18  
 59:21 60:3,6,15 82:2  
 83:17 84:21 85:13  
 86:8 87:2 147:7,17,20  
 148:3,11,13,20 149:5  
 149:19 150:1 151:20  
 152:11,16 154:11  
 160:21,22 161:1  
 162:14 163:9,16,22  
 164:8,22 165:2,4  
 171:1,5,8,15,15 173:1  
 175:17 177:13,18,20  
 177:22 178:6,18  
 179:1 182:13 183:15  
 184:14 186:11 187:9  
 194:15 195:5,15  
 197:4 209:3 210:20  
 213:10,22 214:12  
 238:18,22 239:5  
 251:9,12 258:17  
 270:12,15 339:15  
 341:15  
**informed** 244:2  
**infrastructure** 18:14  
 56:21 57:16 60:8 82:3  
 82:14,19 83:20 85:11  
 89:13 147:21 148:8

148:21 150:4 159:22  
 160:4 162:18,22  
 163:15 171:6 185:20  
 194:22 195:3,9 261:4  
 264:11,16 272:18  
 276:8 376:5,6,7  
**INGAA** 2:16 240:1  
**inhabited** 36:9  
**inherent** 51:12  
**initial** 24:10  
**initially** 75:18  
**inline** 79:21 115:8  
 344:2  
**innovative** 235:5  
**input** 130:14 351:10  
**insert** 97:21  
**inserted** 212:11  
**inside** 106:5 166:7  
**insight** 235:22  
**inspect** 48:7  
**inspection** 79:21 115:8  
 122:6  
**inspections** 228:13  
**instance** 284:7,8  
**institute** 245:20  
**instructions** 6:17  
 227:18 238:21  
**instrument** 212:8  
**integrity** 48:13 49:10  
 77:15,18,20 79:14  
 95:6,16,17 115:6  
 119:13 120:11 131:4  
 131:7 132:8 135:5,13  
**intend** 328:12  
**intended** 38:6 54:16  
 78:8,9 104:4 112:7,8  
 122:8 141:17 227:16  
 328:10 363:9  
**intensifying** 257:22  
**intent** 53:13 95:7  
 181:22 199:15 223:9  
 225:17 248:21 363:7  
**intentional** 179:4  
 320:16  
**intentionally** 54:3 157:7  
**interact** 183:9  
**interest** 147:13 149:10  
 187:2 204:1  
**interested** 58:18 126:13  
 148:9 195:11 291:11  
**interesting** 208:7  
**interim** 250:5,13  
**international** 1:18  
 375:22 376:2  
**interpret** 167:17 353:20  
 353:21 368:13  
**interpretation** 193:21  
**interpreted** 363:16

370:3  
**interpreting** 193:13  
 194:5 370:10  
**interpretive** 193:22  
**interrupt** 6:16  
**interstate** 171:20 245:8  
 245:15 246:13 284:9  
**interstates** 30:5  
**interval** 117:14 120:16  
 128:3 130:2,2,7,13,16  
 131:4,17 132:12  
 134:20 138:6,15  
 139:2 141:13,21  
**intervals** 115:8 116:11  
 119:14,22 120:9  
 128:7 131:5 135:4,7  
 136:10 229:10  
**intrastate** 171:20  
 246:13 282:22  
**introduce** 7:18 32:10  
 33:10 36:18 223:18  
 239:17  
**introductory** 11:9 17:18  
**invaded** 307:12  
**inventory** 23:16 24:4  
 339:7  
**investigating** 305:3  
**investigation** 230:5  
 262:8,12  
**involved** 57:9 133:1  
 149:4 255:8 324:6  
**involves** 186:3 249:3  
 276:5 338:12  
**Island** 32:1 70:11  
**isn't** 71:4 79:3 159:19  
 245:22 324:7 343:22  
**isolated** 248:7  
**isolating** 343:15  
**isolation** 343:19 344:8  
**issue** 23:9 61:13 62:2  
 78:22 93:14 97:3  
 102:3 115:10 151:15  
 167:12,22 168:2  
 169:19 187:8 190:21  
 197:10 203:17 204:21  
 219:5 253:7,8 255:1,3  
 286:1 295:6 299:4  
 300:21 310:5 343:13  
 343:14 351:1 353:16  
 360:14,14  
**issued** 251:10 261:9  
**issues** 12:11,19 14:1  
 68:4 93:1,7 94:1,8  
 100:17 145:16 167:13  
 181:14 183:4 191:6  
 192:11,11 193:1  
 208:8 219:2 253:14  
 281:9 305:10 326:11

335:21 337:3 350:16  
 352:3 365:13 368:8  
**it'll** 153:6 206:7 257:4  
**it's** 3:9 16:11 21:21  
 27:15 32:1,2 33:6  
 34:20 42:10 43:10  
 47:16 48:22 49:13,14  
 49:17 51:2,13 53:22  
 54:22 55:15 59:1  
 63:19 64:6,15,18 65:4  
 68:7 69:21,22 70:14  
 71:5 72:22 75:7,18  
 76:12,18,19 81:4  
 83:10 85:2 88:8 89:10  
 89:10,13,21 91:12  
 93:21 96:14 97:8  
 98:12 99:5 100:10  
 102:20 103:12,14  
 104:2,3,13 105:17  
 109:16 115:9,9 122:6  
 126:18 129:16,18  
 133:4,5,16,21,22  
 134:19,20 135:15  
 138:17 140:14 146:8  
 147:15,16 148:16,22  
 151:9 153:11 154:1  
 156:1,14,15 157:15  
 158:6 159:2,7 161:22  
 164:12,18 165:14  
 167:14 168:1,22  
 170:5,19 172:8,18  
 177:16 178:12 179:6  
 179:16 181:9,10,11  
 186:21,22 187:11  
 188:21 192:17 193:7  
 193:8,13 195:2 196:6  
 201:1,22 202:6 203:5  
 204:7,15,15,16 214:8  
 218:18 245:21 252:10  
 252:14 255:9 257:19  
 261:3 265:1 266:1,4  
 267:7,19 268:4,16,19  
 269:3 270:13,18  
 272:20,21 273:4,13  
 274:7 276:19 282:22  
 286:8 288:13,16  
 292:10 294:2,8,16  
 296:3,5,13 300:8  
 301:18 302:2 304:9,9  
 306:1 307:16 308:19  
 309:8 311:10,12  
 313:3 315:3 316:12  
 318:12 322:16,19  
 324:21 326:22 328:20  
 329:2 330:20 335:15  
 335:16 340:18 341:20  
 341:22 343:15,18  
 344:12,18 345:18

346:5 350:21 352:6  
 354:1,12,15 355:22  
 356:19 359:1 365:17  
 365:20,20 367:1,5,12  
 367:16 369:9,10,12  
 370:17 371:7 372:14  
 378:1,21 379:13  
**item** 11:11 144:9,14  
 219:16

**items** 5:5 6:21

## J

**J** 1:17 2:4  
**Jagger** 2:8 10:10  
**Janice** 10:7,10  
**Jaworski** 2:15 249:7,8  
**Jenny** 10:10  
**jeopardize** 303:9  
**job** 164:16,17 193:13  
 206:21 212:7  
**John** 2:7 10:6,22 11:5  
 17:11 18:6,11 92:6  
 144:6 219:20 239:8  
 268:3 335:17  
**Johnson** 2:8,16 15:9,15  
 15:16 255:19,20  
 257:15  
**joined** 212:13 335:10  
**joint** 255:3  
**JOSEPH** 2:9  
**journalists** 147:11  
 186:22  
**Juan** 35:10 136:6  
**judges** 164:17 193:17  
 193:18  
**judicial** 61:9  
**jump** 15:2 117:19 220:6  
**June** 379:11  
**jurisdiction** 269:20,22  
 326:13,20,22 327:10  
 327:12 331:9  
**jurisdictional** 95:12  
 248:4 319:20 326:11  
**jurisdictions** 317:7  
**justice** 233:7  
**justification** 229:8

## K

**keep** 5:16 22:14 24:11  
 54:20 64:6 76:14  
 93:21 99:7 130:3  
 210:11 214:6  
**keeping** 305:5  
**keeps** 93:3  
**kept** 379:4  
**Kevin** 2:17 246:7  
**key** 80:12  
**killed** 186:19

**kilogram** 230:3 293:14  
 298:2  
**kilograms** 23:18,20  
 52:10,11 59:10 67:7  
 123:17 124:14 298:19  
 300:14 306:5  
**kind** 11:16 13:22 17:18  
 30:15,16 31:15 32:16  
 33:12,15 34:9 35:20  
 39:19 40:6,8 44:2  
 46:1 54:16 60:6 61:3  
 64:17 65:3,10 66:4,5  
 72:14 74:12 76:22  
 78:19 95:19,22 102:4  
 102:6,9 103:5 106:19  
 107:3 109:6 110:20  
 112:18 113:3 115:17  
 128:21 129:5,13,19  
 133:4 135:21 136:9  
 146:17 150:14 166:15  
 173:3 174:9,21,22  
 178:13 186:17 187:12  
 188:4 199:2 200:1  
 203:21 212:10 218:22  
 240:3 274:3,4 277:13  
 299:12 300:8 304:1,7  
 313:1 317:16 319:19  
 320:6 341:14 362:17  
 363:3 370:9 371:11

**Kinder** 87:7

**kinds** 50:7 64:21

177:18 180:13 362:4

**kit** 369:11

**KLESIN** 2:9

**knew** 256:17,18

**know** 10:1 12:16 14:4,8  
 14:12,15,22 15:3 17:4  
 19:13 29:12,16,18  
 31:3 32:4,5 35:2,3  
 37:7 40:9,13 41:5,12  
 41:13 42:7 43:4,18  
 45:19 46:1,7 47:20  
 48:12 49:16 51:16  
 53:18 54:11 55:3  
 56:20 59:13,14,16  
 60:4,14 61:5,6,19  
 62:15 63:4 64:4,15  
 66:15 67:4,18 68:12  
 68:15,21 71:7 74:4,5  
 74:19 76:8 77:1,10  
 79:16 80:9 81:19 82:1  
 82:10,14,20 83:1,10  
 83:15 85:9,15,19 86:4  
 86:9 87:10,16 88:7,10  
 89:9,11 90:13,18  
 91:10,14 93:6,22 94:3  
 95:8,12 98:16,20,21  
 99:18,21 100:6 101:2

102:20 103:9,21,22  
 104:2,17 105:5,7,14  
 105:16 106:8,11  
 107:18 108:13 109:5  
 109:18 110:7,9,15,22  
 111:11 112:3,20  
 113:17 115:7 117:3  
 117:20 118:4,20  
 119:4 120:10,15  
 121:11 122:1 123:1  
 123:17 125:16,22  
 126:2,13,21 128:5  
 129:14,17,19 132:7  
 132:10 134:4,11  
 135:16 136:8,13,22  
 146:4,12,16 147:5,22  
 148:6,15,19,21 149:2  
 149:8,22 150:2,9,9,13  
 151:6,17,20,20 152:7  
 152:20 153:15,21  
 154:8,11 155:2,4,9,19  
 155:21 156:1,17  
 157:16,18 158:15,17  
 158:17 159:3,5,7,20  
 159:21 160:5,12,14  
 162:9,11,13 163:2,7,8  
 163:12 164:4 165:11  
 167:2,9,13 169:10,17  
 174:10 175:2,3,19,19  
 175:22 177:9,12  
 178:17 179:5 181:15  
 181:20 182:4,17  
 183:7,15 184:6,9  
 185:18 186:4,9 187:4  
 188:6,11 189:11,14  
 191:5 192:15 195:10  
 195:17,22 196:4,12  
 196:17 197:2,18  
 200:5,11,13 201:7  
 205:1,5,9,13 206:6  
 207:18 208:3,17  
 212:9,12,22 213:17  
 213:18 214:1,10,13  
 242:7,10 245:12  
 252:22 256:11 263:4  
 264:19,22 266:13  
 268:2,7 269:2 270:10  
 270:15 273:5,7,15  
 275:9 276:10 277:16  
 278:10 279:13,20  
 280:8,13,15,19,22  
 281:7,18 282:2 283:3  
 284:2,6,22 285:12,18  
 285:22 286:8,16,21  
 287:9 289:21 290:4  
 290:13 291:10 294:10  
 294:11,15 295:21,21  
 296:5 297:21,22

298:4,15 299:17,19  
 300:6,9 301:6,15,17  
 302:8 303:8,11,15  
 307:11,13 309:18,22  
 310:18 317:16 318:12  
 318:15 322:8,8,9,10  
 325:13 327:14 328:13  
 329:4,6 338:14,16,20  
 339:14,17 340:13,14  
 341:3,12 342:16,19  
 343:5 344:19 346:20  
 347:1,14 351:1,6,7  
 352:11 355:7,15,18  
 355:22 357:8,10  
 360:17 361:22 364:15  
 365:14 366:12,14  
 367:2 368:16 369:6  
 369:20,21 371:3,16  
 371:20,21 378:7  
 379:19,20  
**knowing** 12:10 97:16  
 213:8 303:10  
**knowledge** 54:9 86:9  
 258:10,12 360:17  
**knowledgeable** 87:11  
**known** 220:17  
**knows** 14:13 192:14  
**Kochman** 2:16 245:7,7

# L

**L** 2:2  
**lab** 243:9  
**label** 180:7  
**Laboratory** 237:6  
**lack** 160:3 205:21 206:2  
 237:15 243:19 364:22  
**lady** 257:13  
**laid** 59:18  
**land** 169:4  
**landing** 169:19  
**landowner** 255:22  
**landowners** 179:19  
**landscape** 63:11  
**Lang** 2:17 246:6,7  
**language** 71:19 91:5  
 92:7,18,20 97:19,21  
 98:17 101:7 102:4,13  
 103:1,5 106:16  
 107:15 128:5 131:14  
 140:1 159:9 161:18  
 164:13 165:14 167:11  
 168:14,17 169:2  
 170:2,14,22 198:5,10  
 200:1,4,5,6,21 201:5  
 206:20 225:13,15,16  
 248:11,12 270:3  
 271:11 276:2,14  
 288:10 290:18 291:11

291:20 294:20,22  
 296:2,8,11,20 300:5  
 302:15 303:15 304:2  
 306:17 311:19 315:2  
 315:21 316:11 317:8  
 320:11,13,17,18  
 321:7 322:15,16  
 327:17 333:18 339:22  
 340:6 347:20 350:2  
 350:17 352:22 357:9  
 358:3,15,20 359:6  
 360:12 361:22 362:7  
 362:20 363:5 367:19  
 371:8,8,21  
**large** 20:18 35:16 36:21  
 41:18 46:6 47:19  
 51:10,13,22 54:14  
 57:12 68:11 80:22  
 87:12 107:20 115:13  
 135:18 236:6 240:12  
 249:20 252:6 281:1  
 284:1,5,6,12 290:11  
 291:2 294:17 296:2  
 299:20 307:2 310:17  
 368:22  
**large-scale** 240:11  
 277:15 278:9 280:4,9  
 280:11,14 299:7  
 307:5 347:1,3 349:5,7  
 349:15 362:9  
**largely** 67:19 81:14  
 291:6 367:3  
**larger** 31:9 33:7,7 34:6  
 34:7,10 37:9 41:7  
 45:21,21 46:4 53:12  
 54:14 70:22 73:1 75:9  
 80:15 81:1 183:22  
 209:4,20 211:9,14,19  
**largest** 36:7,7 70:19,19  
 90:15 241:13,17  
 253:1 277:17 340:22  
**lastly** 6:8 260:6  
**launched** 89:12  
**LAUREN** 2:7  
**law** 1:19 40:14 146:3,9  
 146:17 151:5 165:14  
 167:14 170:20 183:16  
 193:11  
**lawyer** 167:15  
**lawyers** 193:17  
**layer** 155:16 190:4  
 215:19  
**layering** 190:12  
**laying** 65:5  
**lays** 117:22  
**LDAR** 13:3,4 15:1 25:2  
 25:3 52:3,4 124:4  
 126:19 141:10 259:15

260:2 313:14 315:14  
 316:3 318:21 320:4  
**LDC** 255:11  
**LDCs** 253:1 377:8  
**lead** 211:13  
**leadership** 85:10,15  
**leading** 56:9  
**leak** 10:20 12:6,12,21  
 12:22 13:1,12,13,14  
 18:21,21 22:8,10 23:7  
 27:2,6,8,12,21 28:1,2  
 28:15,19 32:13 37:19  
 42:9,13 44:12 45:4  
 51:15,17 56:18 58:1  
 58:12,15 63:13 68:20  
 70:7,13 72:1 81:3,4,5  
 81:17,20 83:12,17  
 85:6 86:3 87:17 88:2  
 94:14 95:10 104:11  
 104:18 105:4,18  
 109:21 116:9,9  
 122:17,18,22 123:7  
 131:1,17 132:9  
 146:10 156:13 166:22  
 167:3,20 172:21  
 173:2 176:15 180:19  
 185:5 189:22 192:15  
 192:17 195:14 196:22  
 202:14 207:7 220:17  
 222:1,7 227:18  
 228:13,18 229:1,15  
 229:20 230:5,7 233:2  
 233:10,16 234:21  
 235:6,9,18 236:1,5,9  
 236:10,16,21 238:4  
 240:4,15,17 242:15  
 242:19 243:4,6,11,20  
 247:6,9 249:3,15  
 250:22 251:8 252:16  
 253:19 254:3,7 258:3  
 259:11 261:6,14,21  
 262:8,12 264:14  
 266:15 272:2,8,16  
 273:11 276:9 283:1,5  
 283:6 288:18 302:20  
 304:4 305:2 308:9,22  
 309:19,21 311:18  
 314:6 333:8  
**leakage** 19:1 22:16  
 27:16 82:6 128:2  
 138:6,15 139:1  
 141:13,21 211:15  
 220:10 221:1,7,10,11  
 223:10 226:7,11,13  
 227:5,7,13,14,22  
 228:17 229:11,21  
 230:2,7 231:5 237:16  
 249:10 250:2 260:7

267:1,6,10 269:9  
 297:11,12 298:16  
 321:19 323:1,10  
 330:13 331:1 332:15  
 332:19 335:21 336:10  
 336:22  
**leaking** 68:14 70:2  
**leaks** 12:7 22:13,17,22  
 23:2,12,13,17,19 27:9  
 52:9,12 53:10,15  
 54:14 56:2,12 57:3,17  
 57:20 58:6,8 59:1,4  
 60:1,13,18 64:15  
 65:15 72:4 81:1 84:22  
 85:8,11,17,21 86:6  
 94:2 105:6 110:10  
 122:3 132:17 156:13  
 157:4 185:9 192:18  
 194:20,21 195:8  
 196:3,10,19 221:8  
 222:9 223:12 227:22  
 228:5,6,15 229:6,9  
 232:21 233:13 234:6  
 237:4 240:9,22 241:1  
 242:5,8,21 249:11,22  
 250:4 252:13 253:22  
 255:4 258:12 261:7  
 261:17 296:18 297:3  
 297:4 303:6 305:1  
 308:11,12 309:5  
 310:2 311:14 312:14  
 312:15 313:10  
**leaning** 200:17  
**learn** 75:18 90:14  
**learning** 113:1 153:19  
 181:17  
**learnings** 43:18  
**leave** 6:20 130:7 193:17  
 234:8 275:3 358:17  
**leaving** 283:8 375:15  
**left** 4:10,14,17 5:1  
 10:18 11:1 28:10  
 335:21  
**legacy** 213:18  
**legal** 73:4,6,10,12 145:4  
 145:16 148:17 164:14  
 164:15 165:6,12  
 167:13 168:15 169:5  
 179:5 193:20 198:8  
**legend** 376:7  
**legislation** 156:19  
 166:17  
**legislative** 194:2  
**legitimate** 73:10  
**legitimately** 73:16  
**LEL** 230:6  
**length** 62:7 198:9  
 296:15

|                                |                                 |                              |                                |
|--------------------------------|---------------------------------|------------------------------|--------------------------------|
| <b>lengthen</b> 132:12         | 83:18 84:6 85:14,17             | 162:2 176:13 209:2           | 368:19,20 369:12,21            |
| <b>lengthy</b> 130:2           | 86:2,12 88:5 104:13             | 245:21 247:3 257:17          | 370:6 371:4 372:8              |
| <b>lens</b> 190:3,3            | 110:1,4 111:9 133:6             | 267:21 273:4 283:22          | 373:12                         |
| <b>let's</b> 10:16,22 67:6     | 138:22 139:16 140:6             | 301:13,21,22 325:3           | <b>loading</b> 293:5           |
| 91:17 126:3 169:20             | 141:7,20 144:15                 | 355:6 363:6                  | <b>lobby</b> 4:18              |
| 184:20 185:8,8,9               | 145:1,9,9,10 146:6,7            | <b>live</b> 158:18 162:17,18 | <b>local</b> 154:3 159:1       |
| 189:6 197:11 212:8             | 146:8 149:17,20                 | 187:6 256:3,4                | 176:21 178:8 187:2             |
| 220:7 314:15 317:6             | 153:17 155:16 157:8             | <b>lives</b> 187:11          | 195:11 247:1                   |
| 337:19                         | 157:8 158:3,5 160:13            | <b>living</b> 178:9          | <b>locate</b> 180:8            |
| <b>letter</b> 228:9            | 161:1 165:16,17                 | <b>LLC</b> 87:8              | <b>located</b> 4:8 153:22      |
| <b>level</b> 20:4 72:14 127:10 | 172:2,14,17 173:4               | <b>LNG</b> 12:15 13:19 14:18 | 174:20 187:4 213:1,9           |
| 158:19 179:3,15                | 177:8 178:17 180:3              | 220:6,8,21 221:3,7,9         | 241:18 278:10 285:1            |
| 189:1,4 235:11 248:6           | 181:9,14 182:1,5                | 222:19 223:1,4,7,10          | 346:22                         |
| 273:8 274:8 276:20             | 185:9 187:14 197:16             | 223:12,14,19,22              | <b>location</b> 157:20 180:9   |
| 277:8 292:9 299:15             | 202:11 205:16 208:18            | 224:20 225:14 226:6          | <b>location</b> 13:6 14:21     |
| 304:1 317:11 361:12            | 209:7,19,22 210:5,6             | 226:7,14,18 227:8,16         | 15:2 25:12 56:12               |
| <b>leveraging</b> 290:3        | 210:14,15,18,22                 | 228:5,6,11,15 229:3,8        | 110:20 141:19 162:14           |
| <b>license</b> 94:15           | 211:10 212:15,17,22             | 229:13,16,21 230:12          | 175:15 177:14 222:14           |
| <b>lieu</b> 222:17             | 213:9 217:1 234:16              | 230:13 231:1 240:6           | 254:14 282:22 284:19           |
| <b>life</b> 257:2,8            | 236:20 238:6 252:13             | 244:12,16 246:15             | 286:10,11 287:3                |
| <b>lift</b> 150:13,17 151:1,10 | 252:14,17 254:12                | 247:12 249:8,18,22           | <b>locational</b> 148:10       |
| 151:10                         | 260:1 278:4,14 287:3            | 250:6,8 253:4,15,18          | <b>locations</b> 19:19 147:8   |
| <b>lifted</b> 361:22 368:22    | 298:5 314:2 333:5               | 254:7,8,15,17 258:22         | 157:7 214:3 286:20             |
| <b>light</b> 126:5 199:15      | 338:11 340:1 341:12             | 259:10,14 260:4,9,13         | 290:14 308:14                  |
| <b>liked</b> 101:4 106:19      | 343:15 345:4                    | 262:17 263:8,13              | <b>lock</b> 174:4 366:20       |
| 367:19                         | <b>lining</b> 290:2             | 264:10 265:20 266:2          | <b>locks</b> 360:8             |
| <b>limit</b> 5:14 224:5 304:12 | <b>link</b> 6:3 161:22          | 266:14 267:18 268:6          | <b>logic</b> 149:3 284:2       |
| 306:13 314:9 331:10            | <b>linked</b> 177:5 192:12      | 268:17,22 269:7,9            | <b>long</b> 30:4,5 31:17 33:20 |
| 333:10                         | <b>liquefaction</b> 240:11      | 272:2 274:4 276:3            | 64:10 105:13 120:15            |
| <b>limitation</b> 79:1         | 277:15 278:17 280:5             | 277:14,17,19 278:3,8         | 175:11 310:10 311:12           |
| <b>limitations</b> 89:4,20     | 280:9,11,14 293:8,11            | 278:9 279:20 280:12          | 372:12 375:18                  |
| 352:15                         | 293:16,20 294:18                | 280:13,20 281:5,21           | <b>Longan</b> 1:20 8:15,16     |
| <b>limited</b> 43:10 65:16     | 299:7 340:16 346:21             | 282:9,20 283:15,18           | 142:16,17 165:9                |
| 232:13 233:11                  | 347:1 349:5,7,16                | 283:19 285:1,4,11            | 168:10,11,12 197:19            |
| <b>limiting</b> 199:2 305:21   | 362:10 369:13                   | 287:22 288:2,19              | 197:20 205:18 206:18           |
| <b>limits</b> 300:18           | <b>liquefied</b> 219:17 220:19  | 292:14,17 293:2,5            | 217:17,18 334:4,5              |
| <b>line</b> 19:16 20:7 25:9    | 265:10 313:10 332:16            | 297:22 298:16 299:20         | 359:9,10,10 363:12             |
| 33:17,18,20,20 58:2,2          | <b>liquefy</b> 283:17           | 301:12,14 303:3,9            | 364:5 370:21 373:2,3           |
| 58:5 62:17 150:9               | <b>liquid</b> 78:14 158:5       | 304:22 306:4 307:2           | 374:7,8                        |
| 157:6,19 158:8                 | 188:8 365:20                    | 307:12 309:17 310:17         | <b>longer</b> 111:6 117:14     |
| 160:19 179:19 180:6            | <b>Liquide</b> 2:18 260:17,19   | 312:7 320:21 321:20          | 139:5 193:4                    |
| 209:9 211:17,17                | 261:10 262:6                    | 323:2,19 326:3 331:3         | <b>longest</b> 132:13          |
| 239:17 254:10 278:11           | <b>liquids</b> 188:6            | 332:20 335:21 336:3          | <b>Lonn</b> 2:17 252:20,20     |
| 279:8,11 285:3,3               | <b>list</b> 182:14 215:16 342:2 | 337:22 338:15,19             | <b>look</b> 26:12 32:14 41:4   |
| 286:5 330:13 336:5             | <b>listed</b> 371:19 372:10     | 339:8,11,12,16 341:2         | 49:14,20 52:5 71:11            |
| 338:2                          | 373:14                          | 341:13 342:6,20              | 73:13,16 75:16,16,19           |
| <b>linear</b> 30:8 31:17 33:20 | <b>listen</b> 6:4               | 343:2,18 344:6,12,20         | 76:13 82:11 86:19              |
| 47:6,11 64:1,19                | <b>listening</b> 182:10 298:1   | 345:6,17,21,21 346:1         | 87:1 96:11 103:19              |
| <b>lines</b> 18:20 19:1,3,7,9  | <b>lists</b> 147:10             | 346:4,6,9,12 347:3,16        | 104:20,21 105:12,20            |
| 19:13,15,18 20:8,10            | <b>literally</b> 31:3 32:6 54:2 | 347:22 348:4,15,20           | 110:1 155:16 161:12            |
| 20:11,17,19,22 21:4,7          | 66:1 76:3                       | 349:13,20 350:8              | 190:16 191:5 192:13            |
| 23:3,4,7 24:9,14,16            | <b>litigate</b> 61:12           | 351:7 352:9,14               | 198:11 206:9 209:19            |
| 24:22 25:11,16,21,22           | <b>little</b> 14:4 16:21 29:8   | 353:14 354:9,14,19           | 212:1 247:17 285:15            |
| 26:2,4 28:20 30:4              | 32:16 35:11 49:18               | 355:8,17 356:14,19           | 311:5 324:2 330:10             |
| 31:8,10 32:21 33:1,2           | 57:4 72:15 74:10                | 357:8 358:10 359:19          | 348:12 352:6 353:15            |
| 35:12 38:22 39:2,10            | 96:19 102:2 116:20              | 360:6 361:19 362:18          | 354:15 362:21,22               |
| 52:2 61:8 63:5 71:20           | 120:22 121:8 123:16             | 363:1,22 365:19              | 365:2 372:15 377:2             |
| 71:22 72:4 81:17,21            | 128:2 151:10 158:10             | 366:2,22 367:7 368:5         | <b>looked</b> 62:16 76:21      |

79:14 150:15 162:1  
212:16 265:8 355:7  
**looking** 31:21 32:11  
44:10 45:3 48:13  
59:16 64:21 65:19  
69:1 99:7 109:6  
137:21 155:15 164:20  
174:8,21 194:1  
199:16 213:2 222:20  
247:22 249:1 277:4  
286:7 296:2 297:10  
298:14 300:5 305:3,8  
305:12 323:22 324:9  
326:17 327:1,9,17  
331:6 350:18 356:21  
366:8 371:1,12  
377:10  
**looks** 42:10 47:15,17  
47:18 49:16 126:4  
340:5  
**loop** 317:3  
**losing** 210:13  
**loss** 84:12  
**lost** 134:17 305:16  
**lot** 4:22 5:2 27:17 29:13  
36:2 40:6 43:22 48:2  
51:13,18 52:13 53:1  
53:15 60:11 62:14  
69:16 75:11 77:9  
82:20 83:16 88:8,10  
89:9 110:11 115:9  
120:22 121:1 122:3  
132:20 137:3 149:2  
154:11 158:2 160:20  
165:19 177:20 180:15  
183:5,6,18 184:6  
187:1 190:12 193:14  
196:20 201:22 205:13  
207:4,8 208:6 245:13  
253:10 263:5 277:18  
286:6,18 290:6  
293:20 297:22 304:8  
305:1 342:13,16,21  
365:18  
**lots** 65:5,5 125:15  
193:20  
**Louisiana** 260:21  
**love** 111:13 349:3  
**low** 19:21 237:8  
**low-stress** 158:4,8  
210:22  
**lower** 22:18 75:6  
209:22 234:12 237:21  
290:18 344:7 346:4  
353:12  
**lowering** 347:11  
**LPAC** 379:14  
**luck** 379:22

**lull** 313:2  
**lunch** 92:10 126:10  
143:21

---

**M**

---

**main** 193:8 246:12  
**mainline** 349:20  
**maintain** 6:9  
**maintenance** 12:20  
13:12 221:9 302:4  
307:6  
**majority** 22:15 37:8  
101:12 128:16 206:1  
249:21  
**makeup** 186:18  
**making** 59:20 68:13  
83:4 98:10 104:17  
186:6 192:21 204:11  
204:12 277:3 282:7  
287:7 290:6 326:18  
350:21 356:1 378:8  
378:13,13  
**makings** 191:21 251:13  
**male** 256:14  
**malfunctions** 246:19  
**manage** 67:20 77:22  
183:8,8 184:4 187:10  
188:16,19 354:19  
**managed** 213:22  
**management** 77:15,19  
77:20 79:15,22 95:6  
95:17,18 115:6  
119:14 120:11 131:4  
131:7 132:8 135:5,13  
354:9  
**manager** 2:9 251:20  
**manages** 87:22  
**managing** 35:2 48:14  
48:19 85:10 154:1  
187:20,22  
**mandate** 24:18 25:8  
223:20 231:14 243:19  
344:20 353:2,14  
**mandates** 11:21 190:12  
191:17 192:1 243:16  
**mandating** 254:7  
349:12  
**manned** 229:4  
**manner** 117:15  
**manual** 25:21 296:13  
**manuals** 19:6  
**manufacturers** 227:17  
**MAOP** 19:22 20:2,4  
172:3 211:12  
**map** 29:19 30:1,18  
66:18 152:2,12  
185:20  
**mapped** 210:6

**mapping** 19:10 152:17  
153:6,11 156:10  
157:1 158:20 159:5  
162:13 166:1,8 173:3  
175:14 186:3,9,20  
200:9 205:15 208:15  
213:11  
**maps** 41:12 56:14  
57:22 59:17 60:4  
117:9 148:7 160:12  
188:10,12  
**March** 1:8 238:19  
377:19  
**margins** 237:21  
**Maria** 10:8  
**mark** 2:8 15:9,13,14,16  
289:4  
**marked** 4:9  
**market** 76:3 280:11  
**markets** 237:22 280:3  
**marking** 179:19 180:6  
211:17,17  
**marks** 234:8  
**marriage** 319:20  
**marry** 288:1  
**Mary** 111:4  
**mashed** 107:16  
**massive** 59:1,2 120:9  
131:1 301:7 347:5  
**Massoud** 10:6  
**material** 172:3  
**materials** 1:3 348:6  
**math** 45:9  
**matrix** 66:1 79:2,6 97:9  
**matrix-type** 65:1  
**matter** 73:15 91:21  
114:18 144:4 219:7  
375:13 380:6  
**matters** 137:3  
**mature** 46:21 49:7,17  
**maturity** 48:2 96:1  
189:2,4 267:19  
353:16  
**Maury** 2:16 255:20  
**maximize** 238:15  
**maximum** 306:13  
**Mayberry** 2:6 3:5,14  
9:22 90:22 91:1 92:6  
102:12,17 103:7  
109:9,12 158:15  
181:3,4 283:21 351:4  
351:14 352:5 364:10  
379:1  
**mayhem** 255:11  
**mean** 15:1 42:21 43:8  
47:2,2 53:11,17,22  
54:7 65:21 66:11 70:4  
70:20 79:6 81:2 89:16

90:1,5 97:20 102:6,14  
103:2 106:6 111:7  
114:16 116:21 118:13  
119:17 120:1,10  
125:8,20 126:20  
130:13,16,22 131:18  
132:1 155:1,3 156:10  
156:13 158:21 163:2  
165:15,18 166:8  
170:3,4 177:19 179:9  
181:6 183:12 184:5  
185:16 187:21 188:3  
188:16 192:8,12,15  
193:15 194:3 200:3,7  
202:6 204:21 213:20  
243:6 263:8 269:5  
276:3 277:14 280:9  
280:10 281:9 282:20  
286:11 297:22 298:6  
300:4,9 301:20  
302:10 306:22 307:8  
309:8 310:17 319:5  
319:12 327:7,15,17  
330:2 338:11 340:9  
340:10,12,14 341:4  
347:4,6 350:20 352:7  
357:1 360:4 361:4  
362:21 364:17 365:17  
365:19 368:13,22  
369:10 370:3,9 372:3  
**meaning** 109:3 222:10  
**meaningfully** 235:5  
378:20  
**means** 19:22 65:1  
94:15 117:8 166:14  
317:4,16,17 318:6,7  
318:22 354:8 358:8  
**meant** 42:19 103:10  
134:18  
**measure** 50:16 66:21  
**measurement** 67:5  
105:7  
**measurements** 51:3  
80:11 151:17 152:10  
153:1 292:14  
**measures** 232:18 293:1  
293:10  
**measuring** 51:8  
**mechanism** 207:16  
**meet** 166:14 167:5  
168:6 175:3,5,14  
307:20 331:19  
**meeting** 3:7,8,19,20 4:5  
5:6,21,22 6:1,2,3,4,7  
6:10,14,20,20,22 7:8  
7:8,10,13,15,21 10:5  
12:17,18 13:2 17:22  
18:9 25:18 32:12

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 37:12 40:2,5 47:8<br>53:19 59:8 66:16,16<br>81:15 85:2 121:11<br>124:15 148:1 160:19<br>172:13 207:19,20<br>270:4 284:18 291:16<br>304:3 312:6 319:7,13<br>379:7<br><b>meetings</b> 10:1 376:9,10<br><b>member</b> 129:14 145:14<br>168:13 178:4 214:19<br>255:21 359:4 379:14<br>379:15<br><b>members</b> 5:12 6:11,11<br>7:17,21 11:4 17:13<br>18:1 19:13 26:18<br>40:12 85:15 94:9<br>133:20 144:6,8 164:2<br>169:3,3 262:18 309:2<br><b>memory</b> 284:16 354:2<br><b>mention</b> 92:13 163:12<br>207:17<br><b>mentioned</b> 13:9 27:4<br>35:19 70:5 154:3<br>181:12 202:14 211:11<br>213:16 258:3 262:2<br>272:20 281:19<br><b>menu</b> 95:4<br><b>MERP</b> 153:3<br><b>messages</b> 196:18<br><b>met</b> 1:10 152:8<br><b>meter</b> 248:3<br><b>methane</b> 11:19 12:1,3<br>16:8,17 50:11,16 51:3<br>51:9,13 52:1 54:9<br>56:1 57:13 58:21 59:2<br>66:22 72:3 80:7 82:5<br>86:6,9 93:15 94:4<br>96:3 146:11 152:22<br>153:3 163:14 166:21<br>167:20 180:20 195:18<br>196:1,21 221:5<br>223:12 226:13 235:1<br>236:4,6 237:12 240:8<br>242:14,16 243:15<br>245:4 249:10 256:12<br>257:22 258:5 260:14<br>261:7 292:13,21<br>294:4,8,9,11,12 339:6<br>339:10 340:22 356:1<br><b>methane-only</b> 251:16<br><b>method</b> 202:13 237:16<br>338:12 344:13<br><b>methodologies</b> 261:14<br>345:9<br><b>methods</b> 221:5 224:10<br>225:13,18 240:15,17<br>349:5 367:13,17 | 368:7 371:19 372:4<br>373:14<br><b>metric</b> 12:2<br><b>Mexico</b> 35:10<br><b>Michelle</b> 10:8<br><b>microphone</b> 5:8 239:16<br><b>Microsoft</b> 184:7<br><b>middle</b> 169:3 172:15<br>174:9 175:1 355:11<br><b>midstream</b> 1:17 294:1,2<br>294:15<br><b>Mike</b> 2:20 251:20<br><b>mile</b> 22:11 23:18,20<br>27:9 281:6,6<br><b>mileage</b> 21:8,11,13,16<br>21:19,22 22:1,8,15,17<br>37:5 42:15 43:21 44:9<br>45:3 62:14 68:5,9<br>98:22 100:3 108:11<br>115:9 160:6,13 186:8<br>242:4<br><b>miles</b> 21:5,14,15,17<br>22:2,10 27:5,10,16<br>28:2 31:3 44:12,16<br>45:1,2,5,6,8,16 50:20<br>53:2 57:14 65:16 68:6<br>68:12 78:15,16,17<br>86:2,22 87:6 97:2<br>99:19 101:11 112:3<br>112:16 115:15 120:8<br>121:6 127:13 133:1<br>134:10 210:18 212:1<br>242:2 246:11,13<br>253:3 261:1,2 262:11<br>369:4<br><b>million</b> 12:2 16:12,22<br>84:11,19,19 152:22<br>224:7 235:11 236:13<br>246:11 247:15 253:2<br>261:2<br><b>millions</b> 256:2<br><b>mind</b> 22:14 61:3 64:6<br>87:3,4 150:7 196:6<br>278:3 285:4 305:5<br><b>mindful</b> 49:2<br><b>mine</b> 201:16 262:10<br><b>minimally</b> 16:11<br><b>minimis</b> 280:13<br><b>minimization</b> 224:10<br>253:7<br><b>minimize</b> 5:8 121:9<br>220:15 221:3 225:11<br>225:16 362:3<br><b>minimizing</b> 224:3,15<br>225:4,20 240:8,22<br>241:4 242:5 253:9<br>341:6 347:10<br><b>minimum</b> 63:21 131:16 | 156:22 184:10 194:17<br>221:11 236:12 237:7<br>249:3 274:15<br><b>Minneapolis</b> 252:1,8<br><b>Minnesota</b> 252:1<br><b>minus</b> 365:19<br><b>minute</b> 5:3 103:15<br>219:4<br><b>minutes</b> 5:14 114:15,16<br>204:3<br><b>mirror</b> 128:16<br><b>mirrored</b> 361:15<br><b>misaligned</b> 327:8<br><b>miscellaneous</b> 13:22<br><b>misinterpreted</b> 248:12<br><b>missed</b> 132:5<br><b>mission</b> 256:22<br><b>missions</b> 269:11 340:2<br><b>Missouri</b> 2:1 191:14<br>283:13<br><b>mistake</b> 349:13<br><b>mistaken</b> 169:5<br><b>misunderstood</b> 326:11<br><b>mitigate</b> 59:2 82:9<br>97:22 220:21 338:9<br>338:20 339:19 340:2<br>342:4,22 362:2<br><b>mitigated</b> 57:18 70:13<br><b>mitigating</b> 94:12 339:18<br><b>mitigation</b> 80:8 146:11<br>167:21 220:11 224:8<br>224:18 336:3 337:22<br>341:21 342:18 344:21<br>345:16 356:1 359:15<br>361:7 368:6 373:8<br><b>mitigations</b> 340:10<br><b>mitigative</b> 342:9<br><b>mixed</b> 255:13<br><b>mixing</b> 238:14<br><b>mixture</b> 252:5<br><b>MMcf</b> 224:7 259:2<br><b>mobile</b> 227:8,15 259:1<br>260:7,9 266:14 267:2<br>267:4 335:22 336:11<br>337:1,9 344:4 347:14<br><b>mode</b> 260:10<br><b>modestly</b> 17:1<br><b>modification</b> 308:17<br><b>modifications</b> 91:5,7<br><b>modified</b> 224:21 369:8<br><b>modify</b> 235:3 238:21<br><b>moment</b> 4:7 5:9 315:10<br>376:13,13,14<br><b>Monday</b> 1:7 14:10,17<br><b>money</b> 196:9,20 254:2<br>261:13<br><b>monitor</b> 41:14 43:8<br>47:19 65:10 89:13 | 226:15,16 246:19<br>311:17<br><b>monitored</b> 229:4<br>246:22<br><b>monitoring</b> 41:17 43:5<br>65:14 96:14 195:19<br>195:22 196:1 226:15<br>227:3 228:12 230:8<br>250:8 254:4 265:2,22<br>266:4 269:11 276:6<br>287:11 291:14 293:18<br>293:22 294:7,13<br>295:6 305:2 313:15<br>315:16 320:22 321:21<br>323:20 324:4 325:14<br>326:17 327:19 331:4<br>331:13 332:21<br><b>monkey</b> 360:5<br><b>month</b> 50:19 228:13<br>249:12 283:4 377:22<br>378:12<br><b>months</b> 89:14 100:21<br>101:8 228:7 296:17<br>297:3 299:19 307:16<br><b>moon</b> 256:22<br><b>Moore</b> 2:18 260:16,17<br><b>Morgan</b> 10:8 87:7<br><b>morning</b> 3:5 7:4 11:4,5<br>14:21 26:19 151:17<br>180:17 183:4 185:7<br>189:15 256:9 375:12<br>380:3<br><b>motion</b> 140:18,19,20<br>141:1 142:9 143:18<br>205:6 206:20 207:11<br>214:18,20 215:4,8<br>216:7,14,17 219:2<br>287:14,19 295:19<br>296:5 312:19 316:5<br>316:16 322:4 331:21<br>335:5 354:10 355:3<br>358:21 359:9 360:22<br>363:7,14,16 364:6<br>365:9 367:20,21<br>370:2 371:9,15 373:1<br>373:4 375:9<br><b>motions</b> 215:1,1 216:11<br>216:12<br><b>motivated</b> 310:2,21<br><b>motivation</b> 310:14<br><b>move</b> 11:13 14:4,9<br>16:14 67:11 75:4,22<br>91:12 132:3 173:10<br>174:2 180:19 197:13<br>198:16 201:3 208:8<br>215:5 220:7 344:10<br>356:22 359:11 364:13<br>364:16 379:21 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**moved** 134:9 314:21  
**movement** 110:13  
 119:4 121:14 136:22  
**moves** 167:1 201:7  
**moving** 5:16 15:8 22:4  
 75:5 76:13 78:4 86:13  
 107:2 121:8 202:4  
 214:1 221:2 301:4  
 317:19 319:5 373:4  
 379:6  
**multi-state** 135:10  
**multiple** 57:16 117:7  
 196:7,13 226:17  
 227:5 228:8 231:2,20  
 232:15 237:2 238:11  
**multiplied** 247:12  
**Murphy** 1:20 9:11,12  
 26:20,21 27:20 28:4  
 39:17,18,18 41:21  
 42:1,1 55:13,14,15  
 81:9 104:7,8,9 109:15  
 109:15 116:4,5,6  
 117:18 122:12,13  
 126:11,11 129:10,12  
 132:6,7 138:9,20,21  
 139:13,22 140:3,5  
 143:11,12 147:2,3,4  
 159:15,16,17 162:5,6  
 162:6 170:18,18  
 182:7,8,9 185:15,16  
 194:10,10 200:20,20  
 213:13,14,14 217:4  
 218:12,13 264:2,3,4  
 268:15,15 271:18,19  
 271:19 273:1 275:6,6  
 278:22 279:1,1 286:2  
 286:3,4 288:9,9 297:8  
 297:8,12 298:11,13  
 300:2 302:19,19  
 308:8,9 320:8,8 321:8  
 321:10,15 322:11,13  
 322:14 325:7,7 328:2  
 328:5,7 329:11  
 334:21,22 339:3,3  
 341:17,18,19 345:12  
 345:12 355:12,13,14  
 375:2,3  
**muster** 4:21  
**mute** 5:7  
**muted** 5:10

## N

**name** 3:14 7:5 8:7 11:5  
 15:15 142:8 171:18  
 171:21,21 217:9  
 239:18 241:9 246:6  
 249:7 251:20 255:19  
 260:16 333:17 373:21

**NAPSR** 157:13 210:10  
 226:9 232:5 309:15  
**NARUC** 376:9  
**nation** 254:16  
**nation's** 147:21  
**national** 2:12,18 19:9  
 159:5 175:14 237:5  
 258:21 261:7 273:3  
 307:11 375:20  
**nationwide** 195:18  
**natural** 2:3 12:14  
 219:18 220:16,19  
 221:20 222:11 224:1  
 232:13 233:19 234:9  
 238:14 239:1 243:1  
 245:8,18 252:5 255:9  
 261:2 265:10 313:10  
 332:16  
**nature** 30:9,21 31:15  
 34:20 47:6 56:21  
 120:7 259:6 303:3  
**near** 34:2 162:17,18  
 175:12 249:18 261:19  
 293:6 355:21  
**nearby** 162:19 181:15  
 188:15  
**nearest** 343:19 344:8  
**nearly** 46:21 52:21  
 84:17 234:12 258:4  
**necessarily** 110:10  
 161:22 174:6 190:8  
 199:6 204:10 244:2  
 275:10 279:14 291:1  
 307:2 348:2  
**necessary** 5:9,15  
 107:20 187:10 273:15  
 299:17 343:16 347:15  
 363:4  
**need** 13:18 26:10 42:22  
 49:7 61:2 73:20 74:19  
 87:16 94:5,13 96:8,19  
 101:3 102:1 112:12  
 117:1 121:20 122:7  
 122:14 123:15 148:3  
 149:19 150:1,18,19  
 150:20 151:3,6 152:8  
 152:21 154:7 160:16  
 160:20 161:11,17  
 162:13 163:12 169:17  
 173:15,15 175:1,5  
 176:3 177:13,18,22  
 187:20 190:17 193:12  
 194:3 204:7,10 205:5  
 216:2 224:21 229:12  
 243:20 263:8 270:16  
 271:9 287:10 291:20  
 294:9 296:13 298:10  
 299:12 306:13 309:11

320:4 330:3 331:10  
 337:12 345:7 348:11  
 350:4 351:1,5,11  
 354:10,22 370:12  
 371:21 372:22 377:14  
**needed** 14:7 61:14  
 139:5 144:9 214:12  
 370:16  
**needing** 75:16 114:7  
**needle** 167:2 180:19  
 198:16  
**needs** 13:9 61:14 76:3  
 82:7 87:18,19 125:18  
 148:20 162:1 173:19  
 175:22 177:21 184:15  
 197:18 255:8 270:13  
 275:10 291:10 296:5  
 307:4 345:8  
**negative** 242:12  
**negatively** 249:2  
**neglected** 262:20  
**neither** 250:21 366:16  
**nervous** 355:6  
**nervousness** 71:13  
**net** 17:7 129:4  
**network** 188:17 241:18  
**networks** 31:6 32:7  
 36:5 41:17  
**Nevada** 246:10  
**never** 51:14 52:2,4  
 112:7 119:17 120:1  
 131:10 167:5 180:4  
 180:12,22 184:4  
 262:5 329:10  
**new** 1:15 11:19 15:18  
 15:20 16:7,10,17 17:7  
 17:8 20:6 35:9 49:3  
 58:18 66:21 79:6  
 88:21,21 102:20  
 131:1 159:20 223:10  
 224:21 226:12 232:3  
 232:8 235:5 237:10  
 243:12 244:1 280:7  
 286:13,17 295:8  
 307:1 377:7  
**NFP** 266:22  
**NFPA** 267:5  
**nobodies** 256:2  
**nodding** 321:3  
**nominal** 33:3  
**non-** 234:12 260:12  
**non-emergency** 221:4  
**non-metallic** 20:2  
**non-regulatory** 230:15  
**North** 241:10  
**Northeast** 259:5  
**northeastern** 30:12  
 31:12 70:6

**Northern** 87:8  
**notable** 339:13  
**note** 6:5,19 83:15 158:1  
 158:4 238:17 240:5  
 249:17,21 251:9  
 253:6,11 292:16  
 303:2 309:3,7 339:4  
 339:12 346:5  
**noted** 58:18 234:5  
 237:5,6 260:22 261:5  
 261:15  
**notes** 25:14 27:14,19  
 223:13,19 225:12,20  
 225:21 226:22 229:22  
 233:15 234:13 236:14  
 236:15 238:2 314:3  
**noteworthy** 22:11  
 46:20  
**notice** 11:18 61:18 62:8  
 153:2 238:20 239:3,6  
**notification** 222:13  
 311:21 312:10,13  
 333:9  
**notifications** 314:7  
**noting** 311:22  
**notwithstanding**  
 164:14 168:14 169:5  
 240:6  
**November** 12:17  
 125:15 277:2  
**NPFA** 266:16  
**NPMS** 25:9,15 26:3  
 59:20 144:10,12,22  
 145:8,18 146:7,9,12  
 146:15,19 147:6,11  
 148:22 149:13 150:10  
 150:18 151:2,7  
 152:18 156:10 157:1  
 157:5,13 158:10,16  
 158:21 161:12 163:10  
 166:14,18 168:6  
 169:8 172:14 176:4  
 179:4,15 180:7,10  
 181:6,7,16 182:12,22  
 186:12 187:15 188:17  
 188:17 189:3,21  
 191:17,20 193:4,10  
 194:14 197:15 204:4  
 206:22 211:7 212:9  
 214:7 216:21  
**NPRM** 10:20 13:3,5,6  
 13:19 16:5 17:6 18:10  
 18:17 20:14,22 22:21  
 27:17 28:14 207:1  
 222:7,8,18,21 232:20  
 237:6 262:4,6 320:11  
 322:16 325:11 328:11  
 339:4 343:15

**NPRM's** 234:21  
**NPS** 175:3  
**nuance** 207:21  
**number** 5:18 7:14 20:13  
 20:18 21:12 36:21  
 38:22 59:15 69:1  
 107:3 125:22 171:18  
 171:19 206:4 301:18  
 342:11 379:12  
**numbers** 44:18,20 52:6  
 126:8 160:10  
**numerous** 158:20

### O

**O** 55:7 226:21 263:22  
 264:12 266:2 272:4  
 278:1 317:14  
**O&M** 220:10  
**Oa** 325:12  
**Ob** 325:12  
**object** 316:17  
**objecting** 304:17  
**objective** 242:6 243:14  
 243:17  
**objectives** 243:18  
**obligated** 47:19 48:4  
**obligation** 204:9  
**obligations** 47:1 133:16  
**obliging** 12:3  
**obscure** 92:13  
**observation** 267:16  
**observations** 92:8  
**observed** 218:22  
**observing** 197:7  
**obtain** 224:21  
**obtained** 160:11  
**obviously** 14:7 40:9  
 59:1 88:4 145:15  
 271:13 350:14  
**obviousness** 365:18  
**Oc** 325:19  
**occasionally** 248:14  
**occupancy** 38:6 104:5  
 141:18  
**occurring** 86:11 141:22  
**ocean** 293:6  
**offer** 125:8 169:2  
 201:17 215:6 239:4  
 283:15 353:1 364:11  
**offered** 216:10  
**Office** 11:7  
**officer** 6:18  
**official** 3:18,19 204:22  
**officials** 147:13 154:4  
 157:17 205:3  
**offshore** 18:19 19:15  
 19:17 24:13 25:10  
**oftentimes** 301:1

**OGI** 228:20 230:10  
**oh** 17:3 39:6 88:16  
 103:15 109:15 114:2  
 124:19 140:2,4 151:9  
 194:9 267:14 268:4  
 297:1 314:17,17,17  
 321:11,14 324:6  
 332:6 360:3 369:4  
**Ohio** 1:16 210:18  
**oil** 154:14  
**okay** 8:6 11:14 22:4  
 25:17 27:20 35:6  
 38:12,16 39:7,9 50:8  
 52:15 54:18 88:17  
 92:6 95:18,22 98:5  
 103:7,15 109:11,16  
 114:20 124:17,19  
 131:19 138:4,7,18  
 139:9,10 140:4,8,13  
 140:14,15 145:13  
 176:1 194:9 206:17  
 207:12 208:2 215:7  
 267:13,14 268:12  
 285:12 292:3 294:19  
 295:2,20 302:14,18  
 308:6 312:22 314:13  
 316:1,3,10 323:16  
 329:20 331:16,17,20  
 332:10,11 335:13,15  
 337:16 340:4,5  
 351:12 359:6 361:8  
 362:4 364:4 366:19  
 368:16 371:2 373:20  
**OMB** 15:19  
**once** 4:21 80:18,18  
 90:18 100:7 118:6  
 119:7 132:15 135:17  
 172:17 244:3 356:8  
**one-call** 191:6  
**onerous** 156:19  
**ones** 106:4 108:21  
 109:1 155:21 273:17  
 273:18 275:4,4  
**ongoing** 173:22 326:17  
**onshore** 19:8 20:11  
 21:4,9 22:11 25:11  
 26:2,4  
**open** 5:11 111:6 118:17  
 200:18  
**opening** 139:15 199:17  
**openly** 172:15  
**operate** 20:16 36:21  
 45:21 54:3 135:10  
 246:15 247:21 253:2  
 253:4 258:22 276:13  
 279:20,21 365:19  
**operated** 21:5,6,9,11,13  
 21:16 68:5,22 241:22

279:5,10  
**operates** 241:14 242:2  
 246:9 251:22 260:19  
**operating** 19:20,21  
 20:5 24:20 68:17  
 101:9 171:19 210:19  
 245:16 299:14 307:9  
 344:1 349:8 352:8  
**operation** 12:20 283:19  
 361:21 362:11  
**operational** 71:2  
 220:22 221:4 227:11  
**operations** 13:11 35:3  
 224:16 241:10 259:6  
 299:9 301:8,13  
**operative** 146:5  
**operator** 13:21 22:2  
 35:4,12 36:13 43:11  
 45:14 46:6,7 58:11  
 67:7,9,14 75:14 76:20  
 87:16,19,21 90:2  
 94:16 96:16 130:21  
 135:10 136:1 147:17  
 152:6 162:21 165:15  
 171:18,18 183:13  
 184:11,12,13 188:18  
 209:4 224:8,16,20  
 225:5 226:14 228:22  
 231:12,20 232:2,16  
 234:5 235:8 236:10  
 237:7,19 262:1  
 266:15 271:8 272:10  
 279:11 303:7 307:18  
 310:20 311:16 319:8  
 372:8  
**operator's** 29:20 35:7  
**operators** 12:4 20:13  
 20:15,16 21:2,3,6,7  
 21:10,12,14,15,16  
 22:2,18 24:21 25:10  
 27:21 31:5 36:14,21  
 37:6,9 38:10,13 39:1  
 43:11 44:15 45:7,21  
 46:11 56:9 67:20 68:6  
 68:10,16,22 69:4,16  
 71:15,17 75:9,10 78:7  
 78:11,15,16 83:5 84:5  
 84:10 85:4,7,10,14  
 86:3,18,21 87:5,6,13  
 88:7 89:11 101:17  
 102:3 103:18 105:17  
 108:9,18 112:7 117:7  
 130:22 132:14 136:7  
 146:19 147:12 150:16  
 152:13 153:10 156:11  
 156:21,22 159:21,21  
 160:8 164:6,21 165:2  
 168:5 171:9,13 172:9

178:5,16 180:22  
 183:5,18,20,22 184:3  
 184:7 185:11 186:6  
 186:11 189:10 195:7  
 196:11,18 207:7  
 209:1,21 210:16  
 214:14 220:13,21  
 221:3,9 224:9,17  
 225:9 226:18 227:6  
 227:17 229:8,11  
 231:2 233:1,12  
 235:20 245:15 248:22  
 249:14 251:5 255:12  
 283:16 292:12 303:5  
 304:22 306:14 307:3  
 310:15 312:9 319:18  
 342:3,6 356:13  
**opine** 328:3  
**opinion** 97:17 104:14  
 350:14  
**opportunities** 43:20  
 170:9 254:19  
**opportunity** 6:6 8:2  
 140:17 153:2 169:16  
 241:21 244:4 245:10  
 249:5 251:17 260:19  
 262:14,18,22 355:19  
 377:5,6  
**oppose** 296:4  
**opposed** 48:22 49:1  
 62:17 76:1 161:11  
 223:6 231:19  
**opposition** 237:3  
**optical** 230:10  
**optimistic** 14:14 366:3  
**option** 28:11,13 37:16  
 40:9 41:20 43:14 76:7  
 76:7,7,8 81:11,14  
 90:1 92:10,12,13,16  
 92:22 102:14,20,22  
 103:1,3,4,5,10,13  
 106:19 107:1,17  
 108:15,17 111:19  
 145:11 198:15 203:9  
 342:6  
**options** 26:11 29:1,2  
 40:8 92:4 103:16  
 215:16,20 216:3  
 230:16 345:3  
**order** 6:8,9 7:10 34:13  
 63:15 98:7 111:10  
 256:19 268:7 362:2  
**ordering** 92:10  
**organizations** 195:11  
**orientation** 65:11  
**original** 20:20 106:21  
 117:9 371:20  
**originally** 131:7 166:1

290:21 324:16 376:17  
**originated** 249:22  
**outage** 302:4 307:22  
**outages** 295:12  
**outcome** 281:11  
**outdoor** 243:4  
**outer** 89:15 300:18  
 304:12  
**outline** 34:22  
**outreach** 196:16  
**outside** 4:16,20,21  
 108:3 119:1 141:15  
 173:20 236:9 243:8  
 292:11  
**outstanding** 336:12  
**overarching** 22:20  
**overemphasize** 96:17  
**overlap** 263:12 269:22  
 270:11 282:8 318:5  
 318:14,20,21 319:7  
 319:12,21 330:21  
**overlapping** 244:15  
 269:20 270:6 317:7  
 317:15,17 319:17  
 327:12  
**overlay** 31:22  
**overlays** 202:17  
**oversight** 171:3 295:14  
 305:1 327:5  
**owning** 24:19  
**owns** 87:21

## P

**P** 1:21  
**P-H-M-S-A** 239:6  
**P-H-M-S-A-2024-0005**  
 5:19  
**P-R-O-C-E-E-D-I-N-G-S**  
 3:1  
**p.m** 144:4,5 219:7,8  
 380:6  
**page** 6:1 7:13 62:8  
 328:9 350:22 364:8  
**Palabrica** 2:9 10:11  
 18:6 27:12 28:3  
 263:15 264:21 265:15  
 266:21 267:11 270:18  
 304:17 312:4  
**pallet** 112:19 113:3  
**paper** 184:5,6 189:10  
 196:5 213:18  
**paradigm** 112:1  
**Paragraph** 19:4 234:19  
**parallel** 221:5 225:22  
 319:16 325:10 344:10  
**parameter** 100:19  
**parameters** 227:12  
 352:9,17

**parcel** 178:1  
**parenthetical** 197:14  
**parking** 4:22 5:2  
**parse** 286:6 288:11  
**parsing** 83:1  
**part** 12:4 20:12 25:11  
 61:22 62:13,16 93:14  
 94:3,15 113:15  
 121:15 128:7 139:14  
 148:5 152:18 153:20  
 173:2 177:8 178:1  
 182:15 187:14 196:16  
 212:14 218:21 220:20  
 221:13,17 224:4  
 226:8 229:18 231:14  
 232:4 233:15,22  
 234:4,19 236:15,22  
 237:16 238:9,13  
 245:19 246:17 250:6  
 254:6 259:20 260:3  
 264:11 267:3,7 276:6  
 306:12 311:4,13,18  
 312:11 323:3 325:12  
 325:18,18 328:11  
 331:11 353:4 366:5  
 366:18 367:19 368:22  
 370:13 373:14 377:19  
 378:14

**partially** 149:17  
**PARTICIPANT** 359:1,4  
**participate** 6:5 19:9  
**participation** 216:22  
**particular** 36:15 68:11  
 84:17 86:7 112:22  
 129:18,20 182:12  
 281:18 286:14 318:9  
 330:11 343:8  
**particularly** 86:11  
 118:11 182:21 197:3  
 210:15 262:9  
**parts** 35:21 66:2 104:22  
 116:12 172:8 235:11  
 236:12 272:6 311:16  
 318:18 323:2 325:12  
**pass** 99:2 111:4 196:13  
 204:18 211:8 353:14  
**passed** 13:11  
**paste** 367:3  
**path** 42:7 77:12,13  
**pathway** 342:22  
**pathways** 339:19  
**patrol** 12:21 18:21 26:1  
 34:21 48:10 64:14  
 65:22 79:8 117:12  
 222:2 234:3,15  
**patrolling** 234:6  
**patrols** 13:13  
**pause** 353:21

**pay** 196:9  
**payer** 254:2  
**peak** 259:1,6 277:20  
 278:10 279:5,10  
 283:15,18 285:1  
 286:15  
**peer-** 57:5  
**peer-reviewed** 58:9  
**Pennsylvania** 30:13  
 31:12 63:6 66:18 70:6  
 79:5  
**people** 30:3 75:4 92:3  
 101:13 154:8 155:4  
 158:17 164:3,7  
 169:19 175:12 177:18  
 177:21 178:9,15,16  
 205:3 215:11 216:5,6  
 219:12 255:22 262:6  
 291:4 323:13  
**percent** 15:22 16:6,18  
 20:1 21:8,13,15,16  
 45:6 52:7,8,22 68:5,8  
 68:21 100:13 125:9  
 230:6 252:4,11,13  
 261:6 280:10 301:3  
 339:9 342:8 344:15  
 344:22 349:6 361:19  
 362:6 364:1 365:16  
 366:1,5,18 367:12  
 369:18,20 371:22  
**percentage** 45:20 237:8  
**perfectly** 46:1 87:10  
 200:14  
**perform** 22:16 220:22  
 228:12  
**performance** 12:22  
 13:14 141:11 221:13  
 222:13 234:17 235:21  
 236:19  
**performed** 20:17  
 117:15 244:2  
**period** 82:13 124:2,6  
 133:3 135:15 239:4  
 331:4  
**periodic** 220:22 267:1  
**peripheral** 175:17  
**Permian** 57:9 62:15  
 63:3 64:2  
**permit** 171:19  
**permits** 13:6 224:22  
**permitting** 311:15  
**permutation** 214:20  
**permutations** 206:4  
 208:7 215:2  
**person** 255:20,21  
**personal** 218:20 375:13  
**personally** 108:16  
 211:1 310:1 316:17

**personnel** 229:7 246:21  
**persons** 24:19  
**perspective** 29:16  
 31:19,20 34:18,21  
 46:5 54:14 56:2,15  
 71:9 72:22 75:17  
 83:16 93:21 104:10  
 116:21 117:21 118:9  
 130:5 150:1 151:15  
 162:11 164:2 174:1  
 180:19,20,21 191:4  
 192:8 200:21 201:21  
 271:8,22 272:7 273:9  
 284:3 295:11,15,16  
 355:21  
**perspectives** 93:10  
**pertinent** 62:2  
**pervasive** 122:6  
**Pete** 157:12 210:10  
 309:15  
**Pete's** 213:15  
**Peter** 1:16 8:11 142:12  
 156:4 157:11 210:9  
 217:13 308:7 309:14  
 333:22 340:4 374:3  
**phase** 32:13 36:3 37:18  
 76:1 78:10,18 82:10  
 96:15 103:2 135:18  
**phase-in** 76:17,18,18  
 76:19 131:6  
**phased** 40:22 41:4,6  
 42:6  
**phased-** 76:1 100:15  
**phased-in** 103:6  
**phases** 89:3 201:2  
**phasing** 47:13  
**phenomenon** 65:13  
**PHMSA** 3:16 5:19 6:1,2  
 7:14 10:3,12 11:17  
 15:16 24:12 25:1,3,8  
 25:9,14 28:6,11,16,19  
 36:19 40:13 42:11  
 43:18 45:5 50:18 57:6  
 61:11 62:5,9 68:2  
 71:21 72:6 73:12  
 76:10 81:18 82:7,12  
 82:20 83:11,19 84:6  
 84:22 85:7 90:13 93:5  
 94:6 95:12,14 96:7  
 98:17 99:6 103:18  
 104:11,13 106:12  
 107:5 109:1 110:16  
 119:2 125:7,14,18  
 126:2,3 130:7 144:7  
 144:11 147:10,14  
 148:19 149:1,18  
 152:19 153:21 161:20  
 165:3 169:7,7 171:1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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                                                                                                                                                                        |
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-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 177:20 185:22 186:5<br>195:3 197:15,18<br>199:13,19 200:9<br>202:5,10 203:6,18,21<br>205:20 206:21 211:8<br>212:6 214:7,11<br>219:20 222:14 223:13<br>223:15,16,19 224:5,9<br>224:13,20 225:12,12<br>225:21 226:3,18,22<br>226:22 227:9,13,16<br>227:19 228:4,10,14<br>229:11,15,19,22<br>230:14 231:3,6,16,21<br>232:8 233:5,15,17,21<br>234:13 235:3,12,22<br>236:14,15 238:2,17<br>238:20 239:2,5,6<br>241:2 244:5,10,15,20<br>245:19 247:4,13,16<br>248:16,21 249:13<br>250:5,7,13,17 251:10<br>251:13 253:5 258:18<br>259:5,18 260:18<br>261:11 264:19 268:2<br>268:14,16 269:3,5,22<br>270:9,12 272:9,15<br>273:8,16 274:14,19<br>275:3 276:8 282:9<br>285:15,19 289:3,12<br>289:17 296:20 297:1<br>297:20 300:20 304:1<br>307:17 308:3 309:12<br>311:2,4 313:13,19,22<br>314:7,8 315:14 317:8<br>317:14 318:9,13<br>322:17 323:4 324:2<br>324:17 325:20 326:1<br>326:12,16,18 327:1,4<br>327:18 328:1 329:1,2<br>329:6 331:5,11<br>332:22 333:3,9,10<br>336:14 339:5 340:1,9<br>342:1 343:5 346:6,14<br>347:21 349:4,14<br>350:3,9,18 351:20,22<br>355:15 356:11,18<br>357:7,12 358:4,9,16<br>359:18 360:5 362:21<br>363:9,19 364:1 368:4<br>371:6 373:11<br><b>PHMSA-2024-0005</b><br>7:15<br><b>PHMSA-covered</b><br>319:11<br><b>PHMSA's</b> 60:14 61:10<br>122:4 194:17 220:4<br>225:17 246:2 249:9 | 251:11 259:21 263:13<br>264:9,14 272:2<br>288:17 318:17 320:11<br>327:10 328:11<br><b>phrase</b> 227:10<br><b>phrased</b> 288:13<br><b>phrasing</b> 288:15<br><b>physically</b> 47:22<br><b>pick</b> 11:1 64:15 253:22<br>375:12<br><b>picked</b> 36:6<br><b>picking</b> 58:22<br><b>picture</b> 23:6 96:4<br><b>piece</b> 121:7 129:18<br>261:4 302:21 366:6<br><b>pieces</b> 125:17 284:6<br>306:4<br><b>pilot</b> 75:17 248:2,5<br>252:1<br><b>pilots</b> 249:1<br><b>pinpoint</b> 56:12 58:12,14<br>196:10 230:7<br><b>pipe</b> 33:3 45:22 46:4<br>54:12 62:12,17 63:4<br>103:2,20 119:16<br>120:8,13 127:16<br>344:11 346:4 347:12<br>356:20<br><b>pipeline</b> 1:3,5 2:15 3:7<br>3:15 7:9 11:7 19:10<br>23:13,17,19 24:12,20<br>25:6 30:3,4,8 33:6<br>36:8 51:8 59:16 60:2<br>60:20 62:13,14 64:1,4<br>81:2 83:8 87:7,11<br>89:17 94:4,14 100:14<br>110:18 118:2 119:6<br>146:5 147:8,15,18,21<br>148:21 150:3 152:5<br>152:12,13,15 153:5<br>154:1,7,20 156:16<br>162:14,18,19 163:15<br>164:5,6,9 165:15<br>170:8,10 171:8,13<br>172:3,3 174:1 175:14<br>176:18 177:3 178:5<br>179:3 180:8,8 185:20<br>186:8 188:8,17,19<br>192:10 194:16,18,22<br>195:8 197:1,3 207:7<br>214:3 220:13,18,19<br>221:19 222:16 223:14<br>223:21 228:2 229:14<br>231:15,19 232:10<br>233:12 234:6,12,19<br>235:17,19 236:7,10<br>237:18 238:10 241:10<br>241:18 242:3,4,16 | 243:14 244:18 248:13<br>250:21 251:16 253:3<br>256:3 257:17 260:17<br>261:10,17 275:13<br>288:3 296:16,19<br>301:2 338:13,14,21<br>340:10 341:6 342:5<br>343:16,19,22 344:3,4<br>344:7,9,10,18 346:12<br>347:4,9,10,15 349:18<br>350:8 352:14 354:21<br>363:2 369:9,10<br>377:11,13 378:6,18<br>378:20 379:18<br><b>pipeline's</b> 61:10<br><b>pipelines</b> 11:20 12:5<br>25:2,4 27:3 31:6 33:8<br>33:8 34:7 35:17 37:8<br>38:4 42:12 50:17,21<br>51:1,4,5,11,12,14<br>52:9,22 53:15 54:15<br>56:1,5,8,10,13,17<br>57:15,20 58:8 59:7,20<br>60:17,19 63:22 64:8<br>66:18,22 68:17,18<br>70:1 80:15,17,22 81:4<br>82:4,5,13 84:3,8,9,9<br>84:14,16,16 85:5,22<br>87:22 89:5 90:15 94:2<br>100:6,10,12 101:11<br>101:21 105:7 110:17<br>113:13 117:10 118:1<br>118:7,12,22 120:1<br>123:12 124:1,2,6<br>128:19 131:10,11<br>132:15,16 133:2<br>141:12,14 147:19<br>148:4 149:8,12,14<br>151:19,21 152:1,4<br>153:22 154:9,20,21<br>155:5 156:11 159:5<br>160:2,7 162:17 164:4<br>164:10 166:1,6,7,13<br>167:4 171:2,16<br>172:20 175:12,13<br>178:7 179:8 180:12<br>181:21 182:17 186:1<br>187:4,21,22 188:13<br>192:14 193:9 194:14<br>196:10,12 211:15,21<br>212:3,5,10 220:17<br>222:4,7,11,12 230:22<br>231:17 232:3,7<br>233:16,20 234:1,4<br>235:1,8,13,15 236:16<br>236:22 237:15 239:2<br>241:14 242:1,6,9<br>245:14,18 246:13 | 247:21 248:17 250:12<br>250:20 251:7 252:12<br>254:16,21 255:1<br>261:3,8 280:1 289:15<br>301:1 303:1 313:18<br>313:21 314:11 333:3<br>333:12 338:10 340:19<br>343:17 346:22 349:20<br>352:10<br><b>pipes</b> 11:21 96:11<br>174:19 175:2,3,21<br>220:12 222:22 225:17<br>231:14 347:13 362:4<br><b>pipng</b> 158:6 225:6<br>250:1 254:9 264:10<br>276:7 352:13<br><b>PIR</b> 33:3 38:7 41:8<br><b>place</b> 48:6 50:2 60:9<br>61:17 65:9 78:3 88:3<br>93:22 96:13 104:16<br>130:4 147:5 148:13<br>148:14 150:2 158:8<br>163:9,10 175:1<br>208:21 224:12 242:7<br>258:2 262:9 267:19<br>271:12 288:20 303:4<br>325:22 329:3,18<br>353:17 356:4<br><b>plain</b> 193:22<br><b>plan</b> 12:1 15:7 90:6<br>307:6 321:1,2,22<br>322:1,22 323:1,21,21<br>324:3,6,11 325:15,15<br>327:18,21 328:17,20<br>329:3,8,13,16,17<br>330:4,5 331:7<br><b>plane</b> 320:9<br><b>planes</b> 56:6<br><b>planned</b> 224:6 233:13<br>250:5,19<br><b>planning</b> 10:1 179:21<br>185:1 208:16,22<br>212:4 213:1 215:7<br>219:10 268:22<br><b>plans</b> 328:15 330:7,9<br>330:11,12<br><b>plant</b> 229:6,13 246:19<br>246:21 247:11 250:1<br>252:1,4 254:8 294:18<br>302:7 350:8 363:1<br>367:7 371:4<br><b>plants</b> 55:4,6,6 229:3<br>246:15,17 247:10,13<br>253:4,15,17 254:8<br>258:22 259:2,2 266:2<br>309:18 347:22 348:4<br>348:15,21 352:9<br>356:22 357:8 358:10 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

359:19 360:6 366:2  
372:9 373:12  
**platform** 66:19  
**play** 73:7 256:5 259:3  
**plays** 11:22  
**please** 3:4 5:7,13 6:5,13  
6:17,19 107:12 113:7  
142:6 217:7 239:16  
239:17 255:16 333:18  
**pleased** 17:17  
**plug** 366:22  
**plugged** 367:4  
**plume** 236:6,9  
**plumes** 57:12  
**pneumatic** 54:2  
**point** 4:22 26:6 38:20  
43:1 60:10 71:14 78:6  
80:21 81:22 83:22  
85:20 86:4,16 99:17  
103:22 104:10 110:16  
111:22 118:8 121:13  
125:11 126:12,16  
138:10 147:17 155:10  
159:7,18 160:15  
162:8 163:21 170:21  
172:12 177:13 181:19  
193:8 194:12 195:6  
205:8 210:12 211:6  
213:15 214:16 248:17  
252:9 268:8 271:20  
273:22 275:7,8,22  
276:16 279:2 293:16  
293:17 295:10 297:13  
298:6 301:12,18  
306:10 307:8 309:16  
314:8 318:12 330:2  
340:17 342:16 345:13  
357:4 365:1 371:17  
**pointed** 62:6  
**points** 63:1 66:10 80:6  
88:10 162:12 171:7  
205:13 208:14 209:5  
244:10 292:10 311:2  
351:21 352:1  
**polar** 176:6  
**policies** 154:12 250:19  
**policy** 154:7  
**populated** 284:5  
**population** 33:9 34:10  
284:20  
**populous** 214:5  
**portion** 288:21 324:1  
**portions** 276:1 313:14  
315:15 320:20 321:20  
323:11,11,15,18  
327:2 331:2 332:20  
**pose** 257:18  
**posed** 151:19

**position** 97:5 102:7  
118:10,19 198:5  
200:13 203:10,15  
205:4  
**positional** 150:19 176:3  
**positive** 17:7 376:20  
378:8  
**possibility** 368:4  
**possible** 78:5 172:22  
201:3 300:1 328:10  
365:17 367:13,17  
**possibly** 268:19 286:21  
**posting** 159:4  
**potent** 54:10  
**potential** 24:14 33:5  
38:9 54:13 70:2,19  
141:19 157:9 231:4  
236:5 281:9 319:16  
345:8  
**potentially** 110:2  
259:19 270:6 286:11  
**pounds** 210:19  
**power** 257:20  
**powerful** 290:4  
**ppm** 12:8 221:12 229:2  
230:6,6,9,9 261:16,19  
292:9,19 293:2,7,10  
293:10 297:20 306:6  
**ppms** 306:3  
**practicability** 79:1  
96:22 97:8 112:2,14  
119:22 127:9 134:13  
353:19  
**practicable** 65:9 76:15  
79:8 97:18 98:19  
100:20 101:10,14,19  
134:1 141:8 217:2  
302:3,10 304:4,10  
305:6 306:16 308:2  
309:8 310:3,14 311:6  
311:11 313:12 314:5  
332:17 333:7 353:4  
354:2,7 359:17  
362:16 373:10  
**practicably** 134:12  
**practical** 63:19 65:22  
66:3 71:5 76:15 89:4  
89:16,20 90:4 99:3,5  
99:10 117:15 126:5  
135:21 136:11 192:21  
193:7 236:8 292:20  
300:17 301:16 305:11  
338:15 353:11 366:9  
366:9 369:18  
**practically** 79:17 136:4  
**practices** 42:9 233:11  
236:1 245:17 341:5  
353:5,11,15 354:14

354:16 355:1  
**preamble** 138:18  
139:15 140:1,2,14  
181:12 248:15 361:5  
**precedence** 48:21  
78:13  
**precedences** 80:1  
**precedent** 37:21 137:17  
192:1  
**precise** 59:14  
**prefer** 290:17 367:18  
**preferable** 148:16  
286:22  
**preference** 302:21  
**preliminary** 16:4 18:15  
141:4 216:19 247:3,8  
249:21 313:8 332:13  
359:13 373:6  
**premise** 234:21  
**preparation** 20:22  
**preparing** 92:18  
**prescribed** 12:7  
**prescriptive** 129:16  
**presence** 258:16  
**present** 1:13 2:5 16:2  
57:18 84:18 144:17  
229:6 246:21  
**presentation** 26:22  
262:20 336:14  
**presentations** 7:12  
**presented** 26:19 27:2,8  
27:9 37:13 261:11  
288:16  
**presenters** 6:17 7:17  
**presenting** 5:7  
**presents** 16:16  
**presiding** 1:11 3:19  
6:18  
**pressure** 19:20,21,22  
20:5,8 53:12 209:8,22  
210:7 211:13,15  
344:1,7 345:20 346:4  
347:11 352:13  
**presumably** 358:5  
**presumption** 201:19  
**pretend** 106:1  
**pretty** 6:12 23:10 24:7  
30:6 150:12,22  
165:14 167:17 308:21  
309:3 330:13 349:8  
350:1 352:22 356:2  
357:11  
**prevention** 179:22  
184:21  
**previous** 18:9 30:18  
191:19 226:4 240:3  
**previously** 105:10  
229:22 234:14 236:18

238:3 261:15  
**PRIA** 16:9,20 20:14  
21:1,19,22 24:1  
230:19 247:4,13,18  
**Prieto** 78:4,10 150:14  
**primarily** 71:3 157:5  
277:20  
**primary** 38:2 165:22  
179:16,17 180:5,10  
181:16 187:20 243:14  
280:7 340:12  
**principle** 270:5 278:2  
317:5 319:12  
**principles** 277:6  
**prior** 42:21 201:2  
**prioritize** 232:9  
**priority** 82:7  
**privilege** 375:14  
**proactively** 322:9  
**probability** 81:2  
**probably** 15:17 47:16  
48:11 49:6 53:16  
71:16 96:2 112:21  
148:16 169:17 195:9  
197:8 198:12 200:12  
206:7 269:3 292:12  
340:21 356:15  
**problem** 54:9 93:15  
99:10 138:13 155:17  
175:7 190:8 202:21  
204:2,5,10,17 209:20  
256:13,18,19,21  
257:1,3,6,7 261:9  
293:11 361:11  
**problematic** 299:21  
**problems** 202:17,18  
209:16 257:9,10,12  
**procedure** 19:6 25:21  
**procedures** 220:15  
221:9 245:17 312:10  
**proceed** 316:7  
**proceedings** 6:15  
**process** 76:2 117:2  
136:9 159:20 166:12  
166:16 173:20 177:9  
303:4 311:18,21  
322:8 325:5 326:18  
327:9 328:13,14,22  
329:12 331:8  
**processing** 31:11 55:4  
299:20 307:5 340:16  
369:12  
**produce** 252:2  
**produced** 7:11 252:3  
**producer** 241:13  
**producing** 20:1  
**product** 84:12 234:13  
**production** 31:7,9

154:14 294:1  
**productive** 4:4  
**Products** 2:20 241:11  
 241:11,14,20,21  
 242:1,5,9 243:10,21  
 244:4  
**professor** 193:11  
**program** 12:22 13:13  
 23:22 64:20 65:18  
 69:6,15,17 87:18 88:3  
 88:6 113:15 126:21  
 130:18 131:1 132:9  
 132:11 134:18 136:3  
 149:1 153:4 211:21  
 233:3 242:7 244:15  
 244:16 249:16 258:6  
 269:21 270:2 271:10  
 271:12 272:20,21,22  
 274:20 312:13 317:11  
 320:3  
**programmatic** 46:22  
 48:2 150:13,17  
**programs** 12:6 47:5  
 48:5 51:15 67:21 78:3  
 96:12 112:10 117:5  
 150:12 192:21 207:7  
 233:3 240:18 244:13  
 248:2 270:6,14 274:1  
 274:13 275:1,2  
 276:21 277:3 282:8  
 313:16 315:17 322:10  
 376:3  
**progress** 74:15 136:18  
**prohibiting** 165:1  
**prohibitive** 43:12  
**Project** 2:9  
**projects** 15:5  
**promise** 243:11 376:13  
**promising** 58:21  
**promote** 270:11  
**promoting** 376:4  
**promptly** 242:7  
**promulgate** 90:14  
**proper** 165:5  
**properly** 7:20  
**property** 84:11 284:6  
**proposal** 12:9 18:19  
 39:21,22 40:4 41:3,10  
 41:19 42:5,11,20 44:8  
 46:18 49:13 52:18  
 55:19 71:12 88:20  
 90:5 94:21 101:15  
 106:8 114:22 135:2  
 139:11 140:1 144:10  
 144:20 145:7 221:2  
 222:5 228:3 231:11  
 231:22 248:5 249:10  
 259:9,21 264:9,14

267:12 272:1 288:18  
 312:7 317:20 321:10  
 326:3 336:1  
**proposals** 106:5 224:14  
 241:3 296:15  
**propose** 19:5,7 25:10  
 38:9 103:3 130:12  
 131:13 197:12 222:8  
 238:18 248:6 276:14  
 295:18 312:7 320:17  
**proposed** 11:18 18:7  
 18:21 22:7 23:11,22  
 25:15,20 49:18 57:7  
 60:14 83:11 86:14  
 104:11 110:16 117:22  
 118:9 119:3 122:16  
 126:22 141:2 147:9  
 153:2 168:4 201:6,9  
 203:6 214:7 216:18  
 221:2,6,10,13,16  
 222:6,18 223:3,7  
 225:15,18 226:10,19  
 227:1,14 229:1  
 230:17 231:5 232:6  
 233:22 235:3,14,17  
 242:10 246:16 248:10  
 250:22 253:20 264:9  
 266:12 270:19 272:2  
 272:9 288:13,17  
 297:19 298:15 303:4  
 303:11 308:10 311:8  
 312:6,13 313:6,17  
 321:7 322:16,18  
 325:8,20 332:3,11  
 341:21 342:1,17  
 345:15 346:13 356:3  
 359:11 363:4,14  
 367:16 373:4  
**proposes** 238:20  
**proposing** 29:17 37:15  
 45:18 53:14 71:6 90:1  
 98:22 203:8 276:8  
 355:9  
**proposition** 78:4  
 150:15 175:20  
**protect** 194:18 287:10  
**protection** 195:20  
 259:13,16  
**protective** 275:16,21  
**proud** 378:14  
**prove** 349:14  
**proven** 59:6 64:15  
**provide** 6:6 29:7,14,15  
 41:3 71:14 108:18  
 171:3 179:1 187:7  
 188:21 216:8 226:18  
 227:10 239:18 248:9  
 249:14 251:17 259:16

277:21 280:1 346:15  
**provided** 15:20 18:13  
 159:1  
**providers** 105:14  
**provides** 252:4  
**providing** 6:3 71:13  
 186:12 259:4  
**provision** 311:9  
**provisions** 194:2  
 222:16,17 230:13  
 231:20 260:5  
**proximity** 36:8 41:8  
 104:4  
**prudent** 73:20 76:16  
**PSI** 20:3,4  
**public** 1:15,16 2:14,16  
 5:12,22 6:4,11 7:18  
 11:5 18:10 26:8 40:12  
 56:3 59:21 82:8 83:6  
 91:9 93:9 105:12,15  
 144:6 147:13 149:9  
 150:20 154:4,4,5,17  
 154:21 156:14 157:5  
 157:10,17 158:16,22  
 159:3 160:17 164:2  
 166:20 167:21 168:1  
 172:5,6 174:19  
 175:10,22 176:13,16  
 176:20,21 177:2  
 178:4 179:11,13,16  
 179:17 180:6 181:15  
 181:18 183:8 184:18  
 184:19 186:22 190:1  
 191:10 192:14 194:15  
 194:20 205:3 207:5  
 207:18 211:20 212:2  
 212:22 213:7 219:14  
 228:8 229:7 238:11  
 239:2,10,12,14  
 245:10 246:22 259:17  
 262:17 263:3,19  
 282:6 291:13 292:16  
 293:19 376:14 377:18  
**public's** 210:5  
**publication** 18:16  
**publicly** 82:1 171:13  
 195:15 293:21  
**published** 11:17 16:9  
 16:20 23:15 50:19  
 140:3 141:2 216:18  
 313:7 332:12 359:12  
 373:5  
**publishing** 232:9 341:9  
**pull** 93:11 200:12  
 288:12  
**pulled** 288:14  
**pulling** 379:16  
**punt** 72:10

**pure** 232:17,21 233:20  
 234:2 235:13 236:11  
 237:20 241:17 245:13  
 258:7 260:20,22  
**purely** 159:2 181:9  
**purest** 200:16  
**purpose** 13:2 89:1  
 157:15 180:10 189:12  
**purposes** 20:12 180:9  
 197:12  
**pursuant** 3:16 25:12  
**pursue** 322:5  
**pursuits** 379:21  
**push** 206:13 254:15  
 256:8  
**pushed** 254:15  
**put** 18:2 29:2 31:20  
 37:17 38:18 41:9,10  
 44:20 45:15 47:17  
 50:18 68:2 71:12  
 75:12 81:15,22 92:7  
 95:3 98:16 99:4 103:3  
 103:7 107:16 108:19  
 120:22 124:1 148:7  
 153:1 157:20 158:15  
 180:22 186:14 198:20  
 200:10,11 202:19  
 205:7 206:3 246:1  
 268:3 288:1 297:21  
 316:5,16 321:18  
 356:20 371:9  
**putting** 10:5 28:8 54:20  
 55:17 65:12 73:17  
 97:16 146:18 200:9  
 261:13 278:16 299:18  
 311:7 370:22

---

**Q**


---

**quack** 212:1  
**quacks** 47:16 104:1  
**quad** 55:7 226:21  
 263:22 264:12 266:1  
 272:4 278:1 317:14  
 325:12,12,18  
**qualification** 13:22 55:1  
 262:2 291:5  
**qualified** 291:15 341:14  
**quantification** 163:14  
**quantifying** 57:12  
**quarter** 33:16 281:6  
 291:3  
**quarterly** 221:7 226:13  
 228:6,12 247:6  
 249:10 254:7 264:14  
 264:18 272:8,16  
 273:10 276:12 278:7  
 278:16 281:19,21  
 284:21 290:12 296:3

**question** 46:16 95:21  
 97:8 98:3 107:22  
 109:18 129:9 134:13  
 136:21 140:17 150:7  
 151:19 157:20 170:3  
 173:6,7,9,13 174:3  
 175:5 176:5 181:5,8  
 182:3 203:11 205:9  
 209:6,12 266:12  
 268:16 269:3,4 270:9  
 271:6 274:13 277:13  
 279:3 282:18 289:4  
 323:8 324:12 345:5  
 351:5 358:3 365:7  
**questions** 26:18 28:6  
 38:17 39:15 94:20  
 116:7 155:11 192:13  
 207:4 262:19,21  
 266:8 268:13  
**quick** 13:7 15:9 305:19  
**quickly** 29:22 78:5,11  
 80:10 167:7 234:9  
 250:3 265:8 329:3  
 379:10  
**quite** 13:16 17:16 48:16  
 58:3 91:10 150:18  
 245:22  
**quorum** 9:18

## R

**R** 2:3 20:9 25:16 28:20  
 34:11 36:11,12 56:20  
 81:21 83:15,18 84:9  
 84:16 85:5,14 86:12  
 90:3 93:14 149:12,13  
 149:19 160:3 172:4  
 210:15  
**R&D** 261:12,13  
**rabbit** 324:18  
**radius** 33:5 141:19  
**Railroad** 62:10 171:11  
 182:15  
**raise** 93:14 208:7 253:9  
 277:12 292:1  
**raised** 94:8 100:18  
 155:12 204:21 351:13  
 351:21  
**raises** 186:10  
**raising** 210:11 285:9  
 295:6 297:14 349:11  
 352:4  
**ramp** 42:15 79:13 134:4  
 134:20  
**ramp-up** 134:18 195:17  
 280:8  
**range** 52:10 126:3  
 247:10  
**rank** 200:1

**rapidly** 66:20  
**rate** 16:1,6,10,18 22:10  
 27:8,9,13 28:2 86:12  
 175:6 230:3 254:2  
 261:6,6,7  
**rates** 27:2  
**rationale** 189:21 191:8  
 199:7,8,15  
**Ravikumar** 1:21 9:9,10  
 38:20 39:9,14 50:14  
 52:19 66:10 80:5  
 99:16,16 143:9,10  
 151:13,13 172:11,11  
 218:10,11 265:7  
 292:5,5 294:21  
 301:11 334:19,20  
 374:22 375:1  
**re-approved** 326:21  
**re-look** 370:15  
**re-pressurized** 260:11  
**reach** 4:21 61:11  
 129:17 197:9  
**react** 109:16  
**reacting** 110:21  
**reaction** 115:22 297:6  
**reactions** 105:9 117:17  
**read** 40:8 164:15  
 165:13 167:14,14  
 170:5 182:14 193:15  
 193:19 196:5 264:13  
 320:1 332:5,7,9  
 333:18 343:14 347:8  
 356:18 363:14 364:5  
 367:15,16  
**readily** 235:19  
**readiness** 105:15  
**reading** 124:18 314:22  
**ready** 26:7 47:22 91:6  
 91:11 112:12 287:14  
**real** 13:7 15:9 34:19  
 61:13 66:19 79:1  
 100:18 152:21 185:8  
 191:7 203:17 204:17  
 243:4 261:16 273:2  
 294:11 305:19 379:10  
**realities** 305:12  
**reality** 203:1  
**realize** 132:2 210:16  
**realizing** 123:8  
**really** 14:10 17:14  
 26:22 29:21 49:13  
 52:16 56:15,22 58:7  
 58:21 59:6,18 60:3,16  
 60:22 69:6,7,14 70:14  
 71:4 72:11,17,19  
 73:15 76:8,12 81:16  
 83:4 86:12 87:15,16  
 87:19,19 97:15 99:10

101:7 102:20 111:11  
 112:1 118:17 121:21  
 127:17,21 134:5,11  
 147:20 148:6,9  
 153:12,20 154:16,21  
 159:4 161:20 163:1,5  
 163:22 164:8,13  
 166:10 168:17 171:9  
 173:19 174:3 176:17  
 177:7 181:6 182:3  
 185:21 189:7 190:11  
 192:22 193:12 195:1  
 195:17 200:8 208:15  
 213:8 245:4 254:17  
 258:17 261:16 280:6  
 295:10,14 299:14  
 302:2,5 304:22 310:5  
 320:16 337:18 346:5  
 359:1 360:19 362:15  
 367:18 369:17 372:14  
 376:19 377:2,7,10,11  
 377:22 378:2,6,8,12  
 378:14,21  
**reappointment** 377:17  
**reason** 51:22 70:20  
 132:11 156:18 165:18  
 170:12 198:18 201:1  
 216:10 259:18  
**reasonable** 99:3,5  
 120:16 134:2 141:7  
 217:2 286:12 302:13  
 313:11 332:17 352:22  
 359:16 373:9  
**reasons** 66:13 181:11  
 181:12 182:4,5 185:3  
 198:8 207:8 305:7  
**reassessment** 115:7  
 119:14 131:8 135:4,7  
**reassessments** 119:16  
**reauthorization** 170:10  
**recall** 40:8 43:13 102:6  
 131:6 317:13  
**recap** 18:7,18  
**received** 18:16 20:20  
 21:1 222:21 226:9  
 228:1 231:12 237:1  
 238:9  
**recognition** 110:8  
 149:18 251:11 357:15  
 357:21  
**recognize** 10:3 73:3,6  
 73:11 75:8 129:12  
 136:21 167:10 177:16  
 240:7,22  
**recognized** 46:9  
**recognizing** 89:3 115:9  
 128:18 355:15  
**recommend** 81:18

83:19 104:15 125:13  
 130:6 170:13 287:1  
 308:16 341:3 370:4  
**recommendation** 91:11  
 129:15,16 145:19  
 167:3 201:5 202:7  
 214:11 275:11 289:2  
 297:16 298:7 312:12  
 326:2 337:12 339:22  
**recommendations**  
 25:19 141:9 144:1  
 226:2,5 229:20  
 263:20 265:5 269:6  
 312:5 314:1 333:4  
 336:5 338:1 342:11  
 355:20  
**recommended** 26:1  
 42:11 126:19 228:20  
 230:1 232:8 234:14  
 235:3,12 236:18  
 238:3 289:13 296:16  
 313:20 314:10 333:1  
 333:11 336:6 338:2  
**recommending** 15:22  
 26:8 116:10 123:19  
 325:9  
**recommends** 28:18  
 201:9  
**recompress** 344:5  
 347:2 349:17  
**recompressing** 338:13  
 347:12  
**recompression** 354:21  
**reconnected** 260:11  
**record** 7:11 49:4 60:15  
 91:9,21 114:18 144:4  
 166:5 169:1 182:2  
 188:4 190:13 203:19  
 203:21 205:7 206:10  
 215:18,21,21 216:9  
 219:7 260:12 291:10  
 296:1,4,6 300:19  
 313:3 342:21 348:1  
 350:1,18 357:15  
 361:13 362:13 364:22  
 370:11 380:6  
**recorded** 7:10,20  
 289:22  
**records** 165:22 166:11  
 166:13 182:2 183:10  
 184:5,6 189:10  
 213:17 256:17  
**red** 30:12 99:2 366:5,16  
 371:8  
**redesign** 369:21  
**redo** 373:1  
**reduce** 11:19 225:10  
 238:1 243:15 340:13

344:22  
**reduces** 342:7  
**reducing** 69:12 166:21  
 189:16 231:13 253:9  
 341:11 344:1 345:20  
 345:21  
**reduction** 12:1 153:4  
 344:15 349:6 361:20  
 362:6 366:2 369:19  
**reductions** 232:18  
 245:4  
**redundancy** 301:14  
**redundant** 254:1  
 317:17  
**reference** 40:17 248:18  
 295:8  
**referenced** 57:6 320:10  
**references** 345:20,22  
 346:3  
**referencing** 53:11 61:4  
 86:21 124:13 196:5  
 322:15,18 325:8  
 327:16 338:10  
**refers** 227:12  
**refine** 370:13  
**refinery** 369:11  
**reflect** 22:22 205:12  
**reflected** 207:22  
**reformatting** 123:9  
**refresh** 284:16  
**regard** 71:16 94:21  
 228:18 255:4 269:7  
**regarding** 24:8 28:12  
 28:14 140:5 141:5  
 145:4 220:8 221:15  
 222:7,19 224:2 225:3  
 225:20 226:7 227:4  
 227:21 228:17 229:20  
 230:12 232:2 234:3  
 234:17 235:16 236:14  
 236:21 237:11 238:8  
 240:3 298:15 313:9  
 320:11 332:15 359:15  
 373:8  
**regardless** 73:17  
 222:14  
**regards** 216:21 227:12  
 252:12 379:3,8  
**region** 52:8 259:5  
**Register** 11:18 62:7  
 141:3 216:19 238:19  
 313:7 332:12 359:12  
 373:5  
**regs** 226:21  
**regulate** 24:9,13 145:9  
 178:19 245:22  
**regulated** 12:4 18:19  
 19:6,8 20:11 21:4,6

24:21 25:11 26:2,4  
 60:20 62:13,17  
 101:12 119:6,17,18  
 119:20 144:13 149:7  
 165:21 166:9 186:7  
 188:9 226:21 229:18  
**regulates** 195:4  
**regulating** 155:15  
 178:7 318:6,9  
**regulation** 25:2 40:16  
 40:20 41:1 64:5 76:3  
 146:14 176:18 185:22  
 212:3,5 240:19 255:6  
 260:2 311:12  
**regulations** 25:4,9  
 32:14 35:22 52:3,5  
 90:14,16 103:22  
 120:2 129:3 131:11  
 131:12 165:22 179:20  
 179:21 180:1 185:3  
 211:8 213:5 223:8  
 232:10,11 258:9  
 259:12,19 260:3,6  
 266:13 280:7  
**regulator** 75:14 98:9  
 161:6 180:5 183:10  
 204:22 377:9 378:3  
 378:13  
**regulators** 147:14  
 179:2  
**regulatory** 2:2 15:21  
 16:4 19:12 37:22 41:5  
 46:22 73:9 82:21 89:2  
 90:11 141:4 171:3  
 177:8 216:20 223:11  
 225:15 230:15 247:3  
 270:16 282:8 313:8  
 317:18 318:18 319:17  
 322:20 326:17 327:9  
 330:21 332:13 359:13  
 373:6 375:20  
**rehashes** 290:7  
**reinforce** 271:7 273:22  
 292:2  
**reinvent** 263:8  
**reiterate** 81:16 240:2  
 342:15  
**relate** 154:12  
**related** 12:20 144:10  
 181:20 238:5,22  
 243:16 259:8 292:10  
 351:7 352:12 364:15  
**relates** 69:12 94:2  
 231:11 253:13  
**relation** 207:5  
**Relations** 375:22  
**relative** 180:21 280:4  
 280:13

**relatively** 19:20,21  
 21:11,21 24:11 36:20  
 37:4 120:12 272:14  
 307:1  
**release** 344:14  
**released** 342:8  
**releases** 220:15 221:3  
 224:7 336:7 338:3  
**relevant** 167:18 325:16  
**reliability** 259:7 277:21  
 295:11,16  
**reliably** 235:10 236:8  
**relocated** 260:10  
**rely** 43:7  
**remain** 258:10  
**remainder** 42:15  
 109:19 110:14 115:14  
 116:14 124:13  
**remaining** 106:9 144:9  
 335:20  
**remark** 157:16  
**remarks** 11:9  
**remediate** 229:9  
**remediation** 249:11  
**remember** 7:18 13:15  
 40:4 48:16 78:14  
 79:19 150:9 154:8  
 206:15 299:11 300:11  
 365:2  
**remind** 178:14 203:5  
**reminders** 7:17  
**remote** 118:7 236:7  
**remotely** 236:9  
**removal** 168:17  
**remove** 103:17 116:2  
 274:19 287:21 321:11  
 363:20  
**removed** 321:16  
**removing** 288:22  
**Renewable** 237:5  
**repair** 10:20 12:7 13:1  
 13:15 18:22 19:2  
 22:16,19 23:1 28:15  
 28:19 32:13 37:20  
 42:9,13 51:15,18  
 56:18 81:18,20 83:12  
 83:18 85:6 86:4 87:17  
 88:3 104:12,19 105:4  
 105:19 109:22 110:11  
 116:9 122:17,19  
 123:7 156:14 157:4  
 167:1 185:9 221:8  
 222:2 227:21 228:4  
 228:15 233:3,14,17  
 236:1,17,21 237:14  
 238:4 242:20 259:8  
 259:11 272:8 276:9  
 288:18 296:12,14,17

296:21 297:2 299:8  
 299:12,16 300:11,15  
 301:3,16 302:20  
 303:6,12,18 304:4  
 307:22 308:9 310:2  
 311:3,10,14,17 312:1  
 312:8,14 313:22  
 314:6 333:3,8  
**repaired** 22:22 196:19  
 228:6 233:13 308:11  
 308:14 309:1  
**repairing** 242:8 262:4  
**repairs** 23:7 167:4  
 211:15 228:13 297:2  
 299:13 310:21  
**repeat** 44:18 68:2  
**repeating** 18:12  
**rephrased** 123:16  
**replacement** 220:16  
 320:19  
**report** 14:3,20 21:20  
 22:13 39:5,13 149:15  
 149:16 189:13 237:6  
 251:5  
**reported** 84:5,6 85:4,7  
 85:18,22 87:2,6 160:7  
 171:12 233:13 249:22  
 261:8  
**reporting** 12:12 13:18  
 14:15,17 21:3 23:21  
 39:11 44:14 84:3  
 85:12 152:8 160:1,9  
 160:22 172:1 182:16  
 214:6 219:11 238:8  
 238:13 256:15 262:4  
 278:7 281:19,21  
 343:5  
**reports** 18:16 21:2 22:9  
 22:22 261:8 262:12  
**represent** 256:1  
**representative** 148:7  
 231:19  
**representing** 21:8  
 240:1 242:3 245:8  
 260:17  
**represents** 121:16  
**request** 251:9 263:16  
 265:12 365:10  
**requested** 25:18 222:15  
 224:9 231:21 232:5  
 232:13 237:11  
**requesting** 144:11  
**requests** 226:3,22  
 227:13 228:14 229:19  
 233:21 243:22 269:5  
**require** 19:5,7 25:10  
 117:5 165:3 179:14  
 183:12 184:10 220:21

221:7 225:9 232:22  
 249:10 338:17 353:17  
**required** 22:15 25:1  
 27:22 117:13 179:20  
 179:21,22 183:17  
 184:14 224:10 235:20  
 249:15 267:5 320:20  
 321:19 323:10,13  
 330:14 331:2 332:19  
**requirement** 23:1 25:15  
 68:11 96:20 99:9,19  
 128:17,20 149:15,16  
 168:5 172:1 179:13  
 181:1 184:19,21  
 185:1 192:4 211:7  
 212:2,4 223:11  
 229:18 247:9 249:13  
 251:5 266:18 267:1  
 307:21 312:8 339:18  
 342:2 353:3 361:17  
 367:15 369:19  
**requirements** 12:12  
 13:19 18:22 19:2,16  
 22:19 25:19,21 26:3  
 29:17 32:19,21 37:19  
 37:22 41:6 68:20 89:2  
 89:2 93:17 124:5  
 128:22 129:2 138:1  
 139:18 141:10 144:12  
 144:22 145:8,12  
 150:11 155:10,18  
 157:3,4 161:21 168:7  
 169:8 174:5 180:13  
 182:16 185:10 197:16  
 199:14 200:9 202:11  
 211:12,16,18 212:15  
 219:11 220:9,10  
 221:17,22,22 222:2  
 223:3,19 226:1,11  
 227:2,3,8,15 229:12  
 229:21 230:1 232:3  
 233:17 234:3,10  
 236:17 238:5,8,13  
 244:17 249:2 259:11  
 259:16 260:7 269:9  
 269:12 271:15 274:14  
 274:17 278:1 280:17  
 283:5,6 284:12  
 285:11 287:12 288:2  
 290:3 291:16 300:11  
 311:15 313:16 315:14  
 315:17 317:12 318:13  
 318:16,21 320:22  
 321:21 323:20 324:5  
 325:14,22 327:19  
 331:4,13 332:21  
 335:22 336:3,10  
 337:1,22 341:2

352:17 361:16 362:15  
 368:15  
**requires** 35:20 120:16  
 164:20 195:4 220:13  
**requiring** 120:7 180:2  
 223:12 226:13 228:11  
 229:8 250:7 361:18  
**research** 58:10,19  
 152:19 163:13 168:3  
 177:22 195:2 232:22  
**researchers** 57:21  
 59:22 196:15  
**resources** 46:11 74:21  
 75:21 115:10 183:19  
**respect** 233:19  
**respectfully** 243:22  
**respects** 379:13  
**respond** 98:2 109:17  
 223:17 279:16 322:11  
 328:5 346:20  
**responders** 147:12  
 150:21 154:3 157:18  
 159:2 176:22 178:8  
 179:18 186:21  
**responds** 11:21  
**response** 107:11  
 154:16 182:18 210:2  
 222:21 275:7 279:3  
 323:5 351:19,20  
 361:4  
**responsible** 10:5  
**responsibly** 85:11  
**responsive** 162:7  
 329:19  
**rest** 14:11 36:1 49:5  
 65:18 78:1 103:5  
 113:1 128:11 149:20  
**restate** 321:8  
**restriction** 224:19  
**result** 72:3 206:6 208:4  
 234:11 243:18 247:14  
 344:14  
**results** 341:9  
**resumed** 91:22 114:19  
 144:5 219:8  
**reticulated** 47:12 120:7  
**reticulation** 65:3  
**retrofit** 369:8  
**retrofitting** 54:1  
**review** 61:9 198:8 239:3  
 267:6 371:18 373:13  
**reviewed** 57:6 266:22  
**reviewing** 265:5  
**revised** 225:9  
**revisions** 233:22  
 289:22  
**revolving** 365:12  
**rewrite** 370:13

**rewritten** 316:10  
**Rhode** 32:1 70:11  
**rhythm** 302:6  
**RIA** 15:10 18:15 231:7  
 249:21  
**Richard** 2:17 252:20  
**Richmond** 1:10  
**rid** 47:3 368:18  
**right** 4:8,8,13,19 7:2 8:8  
 9:17,19 10:18 14:11  
 17:10 26:11,16 28:5,8  
 38:14,16 39:11 44:5  
 46:14,17 50:14 53:4  
 55:12 58:11 61:12  
 62:3,19 66:8,13 67:15  
 67:19 68:5,9,18 69:10  
 69:13 74:16 75:20  
 76:4 77:3,5,13 78:14  
 80:3,22 81:7 83:2  
 86:4 88:12 90:21  
 91:16 92:1,2,8,19  
 94:19 96:22 97:13  
 99:13,14 104:6 105:5  
 105:22 111:8,16  
 113:21 114:9,14,21  
 115:22 117:16 119:10  
 122:10 124:20 127:2  
 128:5,12 129:6,8  
 132:1,12,22 133:8  
 136:12 138:7,17,18  
 140:3,12 142:7  
 147:16 149:1,14  
 151:11 153:13 154:3  
 155:2,6 158:13  
 159:13 160:3,20  
 161:2 162:3,20 163:2  
 163:5,18 164:4,6  
 165:1,8 167:16  
 169:12 170:16 171:11  
 173:5 176:10 177:5  
 177:10,14,19 178:9  
 178:11 186:13 189:18  
 191:2,11 192:5,15  
 193:1 195:16 196:3  
 197:6 198:4 201:11  
 201:14 210:8,17  
 211:2 213:12 214:2,3  
 214:15 217:3,8 219:2  
 219:3,9 220:3 231:9  
 239:9,13,16 245:12  
 254:16 262:16 263:1  
 264:1,7 266:7,19  
 268:5,9 270:7 271:3  
 273:12 274:10 275:12  
 277:9 278:20 282:13  
 283:10 284:8 286:7  
 286:21 289:20 290:21  
 295:2,17 296:9,12

297:5 301:9 303:14  
 304:14 305:13,15  
 306:7,19 309:20  
 310:19 312:2,17  
 314:20 315:11,13  
 316:1,4 317:21 318:7  
 318:21 322:2 323:6  
 326:4 329:20 330:10  
 330:16 331:18 333:14  
 333:16 335:7 336:13  
 336:15,17,18,20  
 337:2,16,20 341:16  
 343:9 345:10 348:6  
 348:16 350:19 351:16  
 352:19 354:12 355:5  
 356:5 357:22 358:20  
 359:3,20 360:1,14,21  
 363:18 365:4,13  
 367:5,9 368:2,7,10  
 370:7 372:5,17  
 373:16,17 375:10  
 380:1  
**rigor** 175:16  
**rigorous** 175:6  
**risk** 154:20 164:9  
 230:16,18,21 242:15  
 290:18 299:16  
**risks** 154:1,17 249:19  
 250:16 251:15 257:19  
 258:9  
**rituals** 98:6  
**Robert** 2:8,10 10:10  
 62:4,5 205:9,17,19  
 207:13  
**robust** 93:8 250:14  
 275:1,2 320:3 324:21  
 327:18 329:9  
**RODRICK** 2:12  
**role** 8:5 11:22 49:17  
 250:6 259:4  
**roles** 125:5  
**roll** 8:2 335:15,16,16  
 337:19  
**ROLLET** 1:19  
**romanettes** 248:11  
**Ron** 2:20 241:9  
**room** 4:12 6:21 69:12  
 71:16 110:22 118:18  
 130:17 135:9 155:20  
 193:15 256:5 292:13  
 372:18  
**Ross** 2:10 62:4,5,5  
 205:9,19,19 207:13  
 207:15  
**roughly** 62:12  
**round** 21:1 22:9 262:11  
 299:4  
**route** 224:22 301:1

**routes** 30:8  
**routing** 343:18  
**RRC** 171:22  
**rub** 203:3,4  
**rule** 16:13,20 17:2,6  
 18:7,11 20:7 22:7  
 23:11,22 25:15,20  
 48:1,13 49:10,22 55:5  
 55:7,11 57:7 60:15,21  
 61:8,10 62:9 78:14  
 83:11 86:14 100:7  
 106:5 117:22 118:9  
 122:16 126:22 137:9  
 137:16,18 138:7,16  
 139:3 141:2 142:1  
 144:1 146:11 147:9  
 156:14,15,16 177:1  
 191:21 201:6,10  
 216:18 221:16 222:6  
 223:17 225:14 227:20  
 232:7,13,16 244:1  
 245:4 251:13 253:20  
 265:9,10 278:13  
 288:13,17 298:15  
 303:5,11 308:10  
 311:8,20 312:7 313:6  
 322:17 325:8 332:12  
 341:21 342:18 346:13  
 352:18 356:3,16,17  
 358:6 359:11 360:8  
 363:5 370:4,13 373:4  
**rule's** 251:8  
**rulemaking** 10:4 11:6  
 11:19,20 43:15 57:8  
 62:8 73:14 81:20  
 82:12 83:21 93:3,19  
 93:20 106:10,18  
 113:14,16 119:3  
 148:2 168:1,3 189:22  
 190:1,5,22 191:9,19  
 191:22 192:2,3  
 202:12 220:5 223:2  
 225:8 231:18 242:10  
 243:15 244:2 245:1  
 245:19 250:14,17  
 258:8 273:2 351:7  
 355:16 356:4 357:16  
**rulemakings** 42:22  
**rules** 6:12 16:1 40:18  
 203:6 258:2 266:2  
 280:21 290:2 319:9  
 345:15 367:16  
**run** 35:13 80:8 120:12  
 120:15  
**running** 33:17 83:8  
 215:16 344:9 361:11  
**runs** 5:6 33:18  
**rural** 82:4 118:6 155:3

187:3 208:16,19  
 213:2 281:10 285:21  
**Russia** 307:12  


---

**S**  
**safely** 241:22 378:11  
**safer** 234:11 250:4  
**safety** 1:3 2:12,15 3:15  
 4:6 5:3 11:7 20:6,21  
 24:12,15 25:13  
 118:12,13,14 121:13  
 146:13,13 156:16  
 168:1 170:8,10 174:1  
 176:18,21 177:19  
 180:20 183:8 187:11  
 189:16 190:6 192:11  
 194:17,18,18 195:12  
 228:2,9 229:14  
 230:17 231:17 233:6  
 235:17 238:10,16  
 243:14 249:19 250:16  
 251:2 256:6 257:17  
 257:19 258:9,9,13  
 259:17 261:10 275:13  
 281:9,14 295:15  
 296:16 327:5 377:11  
 377:13 378:6,19,20  
 379:18  
**Sam** 9:15 143:15  
 218:16 335:3 375:6  
**SAMUEL** 1:14  
**San** 35:10 136:5  
**Sara** 1:19,20 8:15 9:13  
 44:6,17 67:16 92:19  
 108:1 109:12,14  
 111:2 113:5 115:4  
 127:19 136:12 137:19  
 139:12 140:15 142:16  
 143:13 153:14 162:5  
 163:19 165:9 168:9  
 168:12 170:2 174:14  
 176:11 189:19 191:12  
 192:6 197:19 205:18  
 206:15,15,16,17  
 216:15 217:17 218:14  
 266:10 274:11 290:8  
 295:22 296:1,7 299:5  
 303:16 306:8 308:7  
 310:22 314:13 315:12  
 318:1 320:14 326:4  
 329:21 334:4 335:1  
 347:18 349:3 351:17  
 358:1 359:9,10 361:2  
 363:11 365:9,10  
 367:10,22 368:1  
 369:16 370:18,21  
 371:8,13 372:22  
 373:2 374:7 375:4

**Sara's** 200:4 364:22  
 365:3  
**satellite** 43:6,7 172:19  
**satellites** 48:12 49:2,4  
 58:20,22 67:8 89:12  
**satisfaction** 378:4  
**satisfied** 310:1  
**satisfy** 104:18 173:16  
 249:15 287:12  
**Satterthwaite** 2:10 3:3  
 8:4,6,7,11,13,15,17  
 8:19,21 9:1,4,6,8,11  
 9:13,15,17 10:7 142:7  
 142:12,14,16,18,20  
 142:22 143:2,4,6,8,11  
 143:13,15,17 217:8  
 217:13,15,17,19,21  
 218:1,3,5,7,9,12,14  
 218:16,18 333:16,22  
 334:2,4,6,8,10,12,14  
 334:16,18,21 335:1,3  
 335:5 373:20 374:3,5  
 374:7,9,11,13,15,17  
 374:19,21 375:2,4,6,8  
**sausage** 98:10 287:6  
 290:6  
**sausage-maker-type**  
 125:5  
**saw** 30:17 32:15 43:10  
 61:8 117:9 120:6  
 152:15 183:4 244:11  
 244:17 253:6 265:17  
**Saxman** 2:18 258:20,21  
**saying** 14:22 49:8  
 65:20 90:10 96:11  
 115:11 130:3 138:17  
 167:15,16 187:9  
 198:19 199:16,20  
 202:4,9,20 203:1  
 212:8 216:13 289:19  
 309:13 320:2,14  
 323:13 327:2 331:6  
 331:15 337:13 355:6  
 355:18 358:8 359:1  
 365:5 369:3 370:14  
 371:2 372:14  
**Saylor** 2:9 10:11 18:4,5  
 26:5,19 32:9 36:17  
 144:20 145:5 265:14  
 270:17 304:15 312:3  
 321:5  
**Saylor's** 32:16 39:4  
**says** 60:1 71:14 98:17  
 102:5 139:17,21  
 165:15 270:13 288:1  
 294:13 298:15 311:14  
 344:8 350:3 361:21  
**scale** 31:21 61:2 66:4

133:11 134:3,6 176:8  
 281:1,1 283:19 284:1  
 284:2,4,5 337:7,10  
 347:4  
**scaling** 100:1  
**scenario** 243:6  
**schedule** 6:9 14:5  
 227:21 228:4 299:13  
**scheduled** 307:6,21  
**schedules** 12:7 302:4  
**School** 1:19  
**scope** 65:16 144:12  
 223:7 243:17 336:2  
 337:21  
**screen** 26:11 102:14  
 107:17 114:22 200:22  
 226:3 287:21  
**screening** 230:4  
**seared** 186:18  
**seated** 210:17  
**seats** 3:4  
**second** 28:13 29:11  
 51:19 72:19 73:11  
 76:1 78:12,18,18  
 80:21 115:11,20  
 123:14 130:1 139:20  
 142:3 197:13 207:14  
 217:4 254:6 275:7  
 289:11,16 293:17  
 301:11 310:8 314:13  
 314:18,19 316:8  
 317:20,22 321:12  
 324:1 333:13 359:21  
 365:6 373:17  
**secondary** 237:15  
**seconded** 360:22  
 371:10  
**seconds** 142:4 217:5  
 314:14 333:14 359:22  
 373:18  
**section** 24:17 165:4  
 220:12 222:22 223:20  
 224:4,6 225:6 226:8  
 227:5 228:1 231:1,5  
 234:5,19 235:3 237:1  
 240:5 265:11 325:10  
 343:16  
**sections** 38:1,2 120:13  
 164:19 238:9 361:15  
**sector** 47:1 118:21  
 137:22  
**security** 259:4 307:11  
**see** 3:13 4:9 10:16,22  
 16:8 21:12 22:7 28:21  
 30:12,15,19,20 31:15  
 33:17,22 34:2,8,19  
 35:10,14 36:1,11,20  
 37:6,6,21 41:5 42:14

60:3 64:16 66:19  
 84:14 87:9,12,12  
 106:3 112:22 113:11  
 114:3 120:17 140:16  
 144:2 151:22 152:3  
 156:9 167:8 172:6  
 190:13 191:22 195:9  
 208:15 210:4,21  
 212:21 213:6 215:13  
 216:2 226:2 244:10  
 254:20 264:5 268:20  
 304:15 311:5,13  
 313:2 316:7 321:3,11  
 321:13,14 330:10  
 354:15 358:13  
**seeing** 26:10 33:15  
 56:19 59:17 102:17  
 119:4 151:16 169:18  
 185:5,13 195:16,22  
**seek** 28:11 61:9 303:5  
**seeking** 377:16  
**SEELEY** 2:12  
**seen** 3:10 30:14 56:6  
 85:4 86:10 107:15  
 110:7,12 160:1  
 181:13 280:8 293:19  
 294:12 302:15  
**segment** 38:5 141:16  
 225:6 325:8 344:7  
 346:4  
**segments** 80:20 132:16  
 356:21  
**Senator** 223:6  
**send** 4:4 379:8  
**sends** 379:3  
**Senior** 2:8,8  
**sense** 29:18 36:3 37:13  
 43:22 44:3 45:15 46:8  
 49:19 56:16 58:9 59:7  
 60:13 76:12 77:9 95:9  
 96:21 99:12 105:5  
 109:21 110:5 123:19  
 157:16 164:7 167:8  
 178:11 201:8 204:18  
 209:14 255:14 267:17  
 270:2 280:21 281:20  
 282:3,5,12 285:5,10  
 299:2 304:8,13,21  
 318:19 327:13 343:3  
 366:7 367:14 368:19  
 368:20 371:11 372:18  
 377:15 378:4,5  
**sensed** 129:10  
**sensing** 127:14 236:7  
 242:21  
**sensitive** 237:20 258:4  
**sensitivity** 20:17  
 221:12 229:17 236:12

244:16 305:11  
**sensor** 57:11 294:5,10  
**sensors** 253:16,17,22  
 294:8  
**sentence** 124:4,18  
**separate** 43:15 52:16  
 73:13,14 100:2  
 106:10,18 113:16  
 124:3 152:19 176:14  
 177:4 190:1 191:9  
 216:8 223:3 232:11  
 245:1 252:16 267:17  
 326:12  
**separately** 6:14 55:10  
 230:21 267:22 268:7  
 268:11 297:18 298:10  
 351:6  
**series** 339:5  
**servant** 376:14  
**serve** 3:18 7:7 246:10  
**served** 375:19 379:15  
**serves** 379:15  
**service** 1:15 204:13  
 246:12 292:9 295:13  
 301:2 377:18 379:9  
**services** 84:12 246:8  
**session** 377:17,19  
**set** 7:21 11:9,16 14:5,10  
 15:4 17:18 43:2 72:14  
 74:3 77:10 78:15 93:7  
 94:1 98:12 108:19  
 112:11 122:18 125:22  
 136:2,4 156:20 166:5  
 180:2 181:7 194:17  
 206:8 248:3 271:14  
 328:16 330:5 368:8  
**sets** 192:1 199:22 319:9  
**setting** 67:12 76:16  
 133:18 135:21 139:3  
 195:10 275:14 276:20  
 277:8 324:2 328:13  
 366:11  
**Setzer** 2:12 10:11  
**seven** 100:11 119:14  
 120:11 218:19,19  
**seven-** 135:6  
**seven-year** 115:7 131:5  
 131:8 132:10  
**shake** 145:16  
**shape** 55:9 65:10  
**shaped** 55:10  
**share** 15:11 18:2 132:1  
 137:5 147:1 162:11  
 309:6 310:21  
**shared** 84:22  
**shares** 158:2  
**sharing** 59:17 195:15  
**shaving** 259:1,6 277:20

278:10 279:5 283:16  
 283:18 285:1 286:15  
**She's** 376:7  
**Shell** 87:8  
**shift** 118:21  
**shifting** 119:2  
**ship** 293:6  
**short** 5:16 92:2 100:1  
 273:18  
**shortening** 325:13  
**shot** 95:2 115:4 354:2  
**shouldn't** 177:1 196:19  
 213:20 254:10 269:22  
 270:5 326:16  
**show** 30:11,14,19 33:12  
 33:22 36:1 256:17  
 331:8  
**showed** 34:12 36:6,18  
 38:21 63:6 85:5  
**showing** 36:17 312:16  
**shows** 22:1 58:10 85:9  
 85:16  
**shutdown** 344:17  
**side** 16:11 140:12  
 201:18,21 254:18  
 265:1 321:4 323:5  
 329:4  
**sidebar** 116:22  
**sides** 7:22 91:14 198:17  
**sift** 206:10  
**signal** 294:4  
**significant** 21:10 50:11  
 72:3 82:5 94:3 97:3  
 100:15 133:13,14  
 150:12 260:13 309:4  
 377:5 378:2  
**significantly** 134:9  
 153:5  
**siloed** 72:22  
**similar** 21:21 191:15  
 225:22 226:19 242:17  
 244:11,17,19 265:16  
 270:19 286:5 305:20  
 313:17 320:14  
**similarly** 25:7 264:5  
**simple** 64:7 348:10  
**simplify** 107:18 289:15  
**simplifying** 19:22  
**simply** 158:16 205:6  
 242:22 364:16  
**Simultaneous** 140:9  
**single** 32:3 64:3 149:4  
 192:9 268:21 293:9  
**SIP** 328:17 330:8  
**SIPS** 330:7  
**sir** 26:13  
**sit** 73:5 161:5 344:19  
**site** 38:7 55:6 58:12

141:18 293:6 294:3,6  
**site-specific** 263:13  
 291:5  
**sites** 31:7,9 263:10  
**sitting** 135:16  
**situation** 64:4 74:14  
 303:7 307:15 329:8  
**situational** 187:5  
**six** 89:14 100:20,21  
 234:15  
**size** 33:3 35:4 53:11  
 70:11 71:8 75:7 76:20  
 293:2  
**skating** 365:18  
**skip** 219:15  
**slide** 16:2,15 17:3,16  
 19:11 21:18 22:1 24:7  
 27:2 28:9 30:19,20  
 31:22 32:9 33:11,21  
 34:5,8,12,15 35:6,14  
 35:15,18,22 36:10,16  
 37:11 39:6 40:13  
 42:21 45:5 138:11  
 141:1 161:18 199:2,9  
 203:16 204:3 208:1  
 214:18 215:4 220:8  
 253:6 291:11 292:7  
 297:10 337:7 363:16  
**slides** 11:13 15:9 17:18  
 17:21 18:1 29:7,15  
 32:16 37:17 39:7  
 50:18 144:16,19  
 145:7 311:7  
**slight** 262:12  
**slightly** 251:15  
**slow** 335:15  
**small** 21:11 24:7 32:1  
 34:2,22 36:12,20 37:4  
 37:4 38:13,22 45:14  
 46:10 52:11,13 71:15  
 71:17 78:7,12 87:16  
 87:19 96:16 108:18  
 112:7 120:12 183:5  
 209:18 22 213:2  
 248:6,19 251:22  
 261:4 278:9 281:1,4  
 284:1,4,12,22 285:21  
 286:13 294:17 337:7  
 337:10  
**small-** 283:18  
**small-scale** 277:19  
 278:17 280:3,12  
 281:21 283:15 287:22  
 296:10 313:18 332:22  
 346:21  
**smaller** 31:8 38:10  
 75:10 78:17 80:16  
 81:4,5 86:1,18,21

87:5 101:13 103:18  
 104:20 110:3 111:9  
 113:12 130:21 209:1  
 225:6 229:9 237:22  
 279:4 285:16 286:15  
 290:18 294:3 336:7  
 338:3 356:21 372:9  
**smaller-diameter**  
 127:16  
**smaller-scale** 289:1  
**smallest** 343:16  
**smart** 72:11 362:3  
**smoothly** 5:6  
**SMYS** 20:2 172:3  
**snuff** 273:18  
**social** 15:18 16:7,17  
 17:8 94:15  
**soda** 92:16  
**software** 184:13  
**solution** 43:5 65:10  
 203:22 204:6,13  
**solutions** 74:22 89:17  
 305:9  
**solve** 150:22 175:7  
 181:6 302:2  
**solved** 165:13  
**solves** 204:4  
**solving** 262:8  
**somebody** 69:14  
 140:19 309:20,22  
**soon** 144:2 300:1,17  
 302:3,9 304:4,9 305:6  
 306:15 308:2 309:7  
 310:2,14 314:4 333:7  
**sooner** 137:4  
**sorry** 39:3,7,19 44:17  
 54:20 102:19,22  
 113:5 114:2,3 131:21  
 139:22 170:1 200:5  
 264:21 271:5 297:1  
 305:15 314:16 315:9  
 315:17 332:8 354:1  
 360:3 367:20  
**sort** 22:4 42:14 55:16  
 72:21 77:11 81:13  
 83:1 84:1 100:16  
 107:4 110:15 114:6  
 118:19 119:4,8  
 122:21 123:4 148:10  
 149:3 159:18 163:7  
 168:15 170:20 171:7  
 178:3 182:21 190:2  
 190:18 192:16 193:3  
 201:4 202:8 213:18  
 213:21 215:15 265:16  
 272:17 275:18,20  
 276:13,19 279:7  
 286:6 295:9 303:3

304:21 305:11 318:17  
 328:9 331:6 342:22  
 343:7 350:21 362:22  
 365:17 366:7,8,9,12  
 368:7  
**sounds** 71:15 176:1  
 182:11 317:16  
**source** 82:5 165:22  
 230:7 260:14 292:22  
 339:14,16 340:22  
**sources** 54:13 55:5,8,9  
 59:2 70:20,22 263:14  
**South** 87:9  
**Southern** 2:17 252:21  
 252:21 254:21  
**Southwest** 2:17 246:8,9  
 247:7,20  
**southwestern** 33:16  
**space** 37:1 48:3 89:15  
 96:5 97:14 112:15  
 165:5 183:21 189:5  
 267:20 307:1 341:6  
**spaceship** 257:7  
**span** 30:5  
**spanning** 32:4  
**sparked** 263:4  
**speak** 7:19 53:6 54:19  
 59:13 65:16 112:17  
 182:19 369:17  
**speakers** 6:16  
**speaking** 5:7 62:11  
 140:9 155:1  
**speaks** 60:6  
**Specialist** 2:8,9,11,12  
**specific** 24:5 40:16  
 55:6 67:13 116:11  
 152:12 164:21 172:2  
 222:16 224:4 225:14  
 228:4 231:20 233:4  
 243:5 258:8 263:6  
 264:11 296:14 297:6  
 299:18 301:22 350:6  
 351:12 355:20 358:15  
 358:16 369:16  
**specifically** 25:1  
 156:18 191:18,22  
 211:8 228:18 240:6  
 240:17 246:17 251:1  
 274:12 284:10 302:20  
 339:10 345:17 355:17  
**specificity** 41:3,10  
 363:21,22 371:16  
**specifics** 350:15 354:9  
 364:14  
**specify** 53:2  
**spend** 108:9 169:17  
 189:9 196:20  
**spent** 29:13 47:8 82:12

82:20 152:22 262:7  
 341:4  
**spider** 31:15 32:7 34:20  
 120:7  
**spirit** 103:16  
**spoke** 59:13  
**spoken** 105:11 263:17  
**sponsoring** 92:20  
**Springfield** 2:1 191:14  
 283:13  
**squarely** 106:4  
**Squibb** 2:1 9:2,3 143:2  
 143:3 191:12,13,13  
 218:3,4 283:12,12  
 334:12,13 374:15,16  
**Stacy** 47:14  
**staff** 2:5 336:14  
**staffer** 376:16  
**stage** 11:10,17 14:10  
 15:4 17:6,19 46:18  
 78:12  
**staged** 49:9  
**staggered** 136:10  
**staging** 135:14  
**stairs** 4:11,17  
**stakeholder** 93:10  
**stakeholders** 37:14  
 56:3 60:16 147:10  
 149:9,10,18 150:3  
 194:16 233:8 343:6  
 377:9  
**stand** 69:6 87:17  
 148:22 185:10 190:17  
 202:1 270:13  
**standalone** 250:17  
**standard** 13:1 56:18  
 59:9 66:13 67:3,6,12  
 75:6 105:2 119:5  
 122:22 123:5,7,11  
 126:18 161:9 166:14  
 175:14,15 184:10  
 204:16 229:1,16  
 230:4,17 234:18  
 235:21 236:19 245:16  
 250:11 251:8 254:11  
 254:13 255:16 264:9  
 264:18 266:17 272:9  
 272:11,15,17 273:3,7  
 273:8 276:5,9 279:8  
 288:20 293:2,14  
 297:19,20 298:3,19  
 302:22 303:12,18  
 322:20 323:4 326:1  
 343:2 356:2  
**standardizing** 160:22  
 161:7  
**standards** 10:4 11:6  
 13:14 27:6 28:16,18

28:20 42:10,14 61:3  
 63:2,22 81:18,20 83:7  
 83:12,18 85:6 88:2  
 104:12 105:4,19  
 109:22 110:18 116:10  
 141:11 148:12 156:22  
 163:3 167:6 171:7  
 172:13 186:5 194:18  
 220:5 221:13 222:13  
 223:4 228:22 230:22  
 232:5 233:6,20  
 235:14 249:16 250:21  
 250:22 251:21 263:22  
 264:12,16 266:16  
 272:2,4 273:6,14  
 275:13,16,21 276:11  
 285:16 288:18 322:19  
 323:2 325:16 328:14  
 328:16 329:5,6,14  
 330:6  
**standby** 260:10  
**standing** 88:6 192:21  
**standpoint** 244:22  
**start** 27:22 30:19 33:22  
 34:4,8 36:4 37:20  
 43:17 55:20 64:21,22  
 65:5,19,20 71:7 78:2  
 78:4 80:11 92:5  
 100:13 105:16 169:20  
 201:4 326:16 336:21  
 338:4 341:20 343:6  
 378:11  
**started** 5:4 7:16 43:9  
 48:15 77:18,21 378:7  
**starting** 60:8 70:17  
 79:17 86:17 96:13  
 100:8 104:10 110:16  
 118:8 125:6 130:4  
 147:5 148:12 149:12  
 288:11 342:16 366:6  
**starts** 137:4,4 290:6  
 325:11  
**state** 1:14,15 32:1,2,2  
 33:16 34:22 35:1,4  
 40:14 53:17 70:3,11  
 75:15 79:2 93:18  
 101:17 117:6 130:19  
 133:19,21 147:14  
 161:6 186:18 205:1  
 240:18 244:13,16  
 248:5 259:14 269:21  
 270:14 272:20,21  
 273:6,7 274:1,13,20  
 275:1,2 276:21 277:3  
 281:4 282:8 298:10  
 310:17 313:16 314:8  
 315:17 317:11 320:3  
 321:1,22 322:21

323:1,21 324:11  
 325:15 327:18,21  
 328:19 329:8,12,16  
 330:3,6,11 333:10  
 378:3  
**stated** 40:14 132:12  
 227:6 228:22 230:14  
 232:20 233:10 275:11  
**statement** 95:6,20  
 256:9  
**states** 32:8 57:10 65:7  
 66:2 79:7 82:16 97:10  
 146:4 236:3 241:16  
 246:14 253:2 261:1,3  
 273:14 274:6 275:14  
 275:20 328:15 330:7  
 349:16  
**static** 74:14  
**stating** 224:17  
**station** 265:11 266:1  
 294:17 326:1  
**stationary** 246:18  
 260:13  
**stations** 226:20 244:12  
 259:22 263:11 264:13  
 270:20 294:2,3  
 320:12 322:17 325:9  
 325:20 356:13  
**statistics** 69:17  
**statute** 164:20 194:2  
**statutes** 164:15 193:13  
 193:15,20,21 194:5  
 259:12 260:6  
**statutory** 25:7 148:19  
 170:22 223:4,18  
 243:19  
**stay** 19:14 367:18 379:7  
**step** 32:20 35:20 55:18  
 88:7 109:8 178:12  
 244:5 250:5,13  
 320:15  
**steps** 340:1  
**Steve** 2:1 9:2 143:2  
 189:19 191:12,13  
 194:7 218:3 283:11  
 283:12 334:12 374:15  
**stock** 366:20 377:2  
**stop** 42:14 44:2 321:4  
 329:18 331:1  
**storage** 12:14 220:19  
 224:1 279:22 339:8  
 339:11 346:2 347:14  
**store** 283:18  
**stories** 292:18 293:8  
**straightforward** 64:7  
 205:20  
**strategies** 344:21 347:9  
 347:15,17

**stream** 248:20  
**street** 5:1,2  
**strengthen** 249:13  
 342:13  
**strengthens** 163:16  
**stress** 20:1,3  
**strike** 289:16,17  
**strikes** 46:17,19  
**stringent** 274:17  
 325:17  
**striving** 213:21  
**strong** 350:1  
**strongly** 153:16 360:16  
**structure** 33:4 36:9  
 41:8 274:4 322:19  
 325:10 330:15  
**structures** 188:15  
**struggling** 66:6 97:11  
 106:18 156:8 185:12  
 191:1 362:12  
**stuck** 366:13  
**studies** 24:2 50:15,22  
 51:6 57:6  
**study** 57:8 58:6,7,16  
 60:1 62:16 63:4 64:3  
 98:18 132:22 196:14  
 243:10,20 244:1  
 338:17 345:2 353:10  
 354:2,5 355:6  
**studying** 310:5  
**stuff** 180:15 202:16,18  
**sub** 116:12 139:10  
 325:12,18 373:14  
**sub-bullets** 268:17  
**subject** 18:20 19:15  
 22:19 27:5,16 32:19  
 39:10 42:13 44:12  
 45:4 52:2,4 64:2  
 68:19 69:14 85:6  
 103:21 105:18 108:4  
 120:2 123:6 128:17  
 131:10 156:12 172:17  
 180:12 227:2 240:4  
 245:11,20 250:10  
 251:7 259:10,15  
 260:2,4 263:22  
 265:21 266:4,15  
 269:21 320:21 321:20  
 323:19 324:4,7 327:2  
 331:3,12 332:20  
**submission** 25:14  
**submissions** 146:7  
**submit** 5:17 25:12  
 146:19 157:1 164:21  
 165:17 180:4 207:19  
**submittal** 168:6 188:20  
**submitted** 5:20 23:21  
 57:7 60:5,16 184:15

248:4  
**subscribe** 133:21  
**subsequent** 219:2  
**subset** 27:11 32:18  
 34:6 35:19 38:3 42:12  
 43:17 44:11 45:17  
 46:4,7 47:4 49:16  
 63:3 68:9 69:2 86:1  
 101:16,21 108:3  
 115:13 124:12 129:1  
 129:22 130:1 145:12  
 172:4 175:21 209:18  
 211:22  
**subsets** 75:11 88:21  
 110:2  
**substantial** 16:21  
**subsystem** 171:21  
**successfully** 195:1  
 288:14  
**suddenly** 99:18  
**sufficient** 215:18,22  
 225:19 270:22 272:22  
 324:22 327:20 350:17  
**suggest** 44:1 91:3  
 224:5 253:20 254:5,8  
 296:19 298:13 310:3  
 315:21 335:8  
**suggested** 45:13 222:5  
 226:14 228:3,5,10  
 229:15 231:16 236:10  
 238:13 350:7  
**suggesting** 24:2 116:8  
 127:11 281:17 368:21  
**suggestion** 198:1,2  
 247:16 364:11  
**suggestions** 200:18  
 261:13 294:20  
**suited** 57:1  
**summarized** 18:10  
**summary** 12:9 19:11  
 62:15  
**summer** 186:16  
**Supervisory** 2:10  
**supply** 259:2,4 280:3  
**support** 64:19 90:3  
 104:16 108:5,7,14,17  
 114:8 127:12 130:14  
 149:6 226:10,12  
 228:3 237:7 249:9  
 251:4 257:2,8 258:6,8  
 258:11 261:21 291:19  
 299:2 308:19 361:18  
 362:7  
**supported** 59:8 141:3  
 216:19 313:7 332:13  
 359:13 373:6  
**supporters** 253:12  
**supporting** 60:15 62:9

86:14 116:8 129:14  
 272:8 288:17 297:19  
 308:20  
**supportive** 153:16  
 288:22  
**supports** 223:10  
 243:10 260:2 348:2  
 350:18  
**supposed** 157:15  
 158:10 162:22  
**sure** 17:16 40:3 42:4  
 44:9 45:10 46:18 53:8  
 57:17 58:4 67:21  
 68:14 72:16 75:3  
 104:17 116:7 123:20  
 137:14 153:10 155:20  
 161:22 170:11,13  
 174:6,12 183:1,21  
 184:2 189:6 194:12  
 197:22 199:1 205:19  
 207:1 211:1 244:14  
 274:14 276:3,16,20  
 277:3,7 278:15 282:7  
 298:12 303:18 305:10  
 309:17 311:11 317:3  
 320:10,16 323:12  
 327:3 328:8 339:12  
 341:13 345:13 350:21  
 360:19 362:14 367:11  
**surgical** 212:7  
**surgically** 212:10  
**surveillance** 24:1 30:7  
 30:10 31:19 48:11  
 63:19  
**survey** 18:21 19:2 27:6  
 28:15,19 30:10 34:21  
 42:9,13 51:18 52:21  
 56:1,18 57:13 63:15  
 63:18 66:17 69:8,9  
 80:13,16 81:17,20  
 82:18 83:12,17 85:6  
 86:3 87:17 88:3 93:6  
 97:1 100:4,6,9,12,19  
 104:11,18 105:4,18  
 108:2,4 109:19,21  
 110:3 111:5,6,10,14  
 113:12 115:12,17  
 116:9 117:13,22  
 119:6 122:17 123:1,2  
 123:7,13 124:11  
 125:12 127:11 128:2  
 128:7,17 129:22  
 131:1,17 132:9,13,21  
 132:22 133:21 135:6  
 138:6,15 139:2  
 141:13,21,22 156:11  
 157:3 166:6 173:2  
 179:8 180:13 185:9

188:12 196:8,13  
 211:15 221:10 222:1  
 223:10 226:11 227:7  
 227:13,15 229:12  
 230:2,8 233:10 247:9  
 253:19 254:3,7 260:7  
 264:15 266:15 267:1  
 269:9 272:2,8,16  
 276:9 278:1,12  
 280:16 281:22 283:2  
 283:5,6 284:18 285:8  
 286:8 288:2,18 289:3  
 289:12 291:16 300:15  
 313:19 323:1 332:22  
 335:22 336:10,22  
**surveying** 27:22 28:1  
 133:6 166:13 236:6  
 284:21,21 285:2  
**surveys** 12:21 13:12  
 22:16 27:16 44:13  
 45:4 51:2 56:4 57:9  
 80:18 101:10 105:16  
 117:6 122:18 133:4  
 135:12 153:5 167:3  
 172:17 188:14 195:14  
 202:15 220:10 221:1  
 221:7,11 223:12  
 226:7,13 227:5,22  
 228:18 229:21 230:4  
 231:5 247:7 249:11  
 250:3 261:21 264:18  
 267:6,10 273:11  
 276:5 278:17 290:13  
 293:15 297:11,13  
 298:16 313:10 321:19  
 323:10 330:14 331:2  
 332:15,19  
**sustainable** 66:3 76:16  
**swath** 57:2  
**switch** 48:9 49:6 315:3  
**switching** 64:22 231:9  
**sync** 302:6  
**synchronize** 278:3  
 282:9 285:10  
**synchronizing** 300:13  
**system** 19:10 30:2,17  
 30:21,22 31:14,16,18  
 32:4,6 33:14,14 34:3  
 34:9 35:5 63:13 65:19  
 65:21 70:7,21 74:3  
 78:2 152:17 153:6,11  
 157:1,5 158:6 171:14  
 171:20 172:19,19  
 173:3 178:16 180:11  
 187:15 188:20 191:6  
 192:17 201:20 205:15  
 208:16 213:11 237:16  
 248:7 252:7 255:5,10

255:14 257:2,8  
 260:20 279:21 283:7  
 301:4 339:1  
**systems** 23:14 34:19  
 35:2 41:14 43:6,8  
 53:16,21 54:4,5 63:18  
 65:6 68:14 89:17  
 90:10 94:4,14 110:8  
 110:14 111:12 135:19  
 164:5,9 177:3 179:10  
 183:11,15,19 184:1,2  
 184:5 188:1 189:1  
 229:5 250:8 258:15  
 260:22 277:21 291:15  
 293:18,22 294:14  
 318:5 319:19 344:17  
 351:8 369:8

# T

**T** 1:14  
**table** 27:13 29:3 39:22  
 42:5 83:17 112:20  
 140:12 201:16 202:3  
 307:3 309:18 316:5  
 331:22 357:15  
**tables** 339:5  
**tackle** 219:5  
**Tacoma** 310:18  
**Tahamtani** 10:6  
**tail** 30:16  
**tailor** 251:13 356:18  
**tailored** 251:1 299:15  
 362:8  
**tailoring** 362:15  
**take** 3:4 5:9 8:2,5 13:5  
 14:21 44:12 53:22  
 55:18 63:14 88:14  
 91:3,18 111:18  
 112:22 113:19 114:12  
 125:21 131:13 136:13  
 140:16 142:5 143:20  
 159:10,12 166:9  
 189:10 197:11,14  
 214:21 217:6 219:3  
 219:17 224:11 225:1  
 247:16 262:9,18  
 266:19 269:8 289:6  
 301:2 307:17 308:16  
 311:16 314:15 316:2  
 318:17 333:15 340:1  
 358:16 360:1,18  
 361:1,1 373:19  
 376:12 377:2 380:4  
**taken** 32:20 39:13  
 106:16 167:22 168:2  
 194:3 244:14 295:13  
 364:12  
**takes** 10:2 43:18 73:21

73:22 356:4 375:11  
**talk** 47:13 57:4 61:20  
 71:3 89:9 92:3 104:19  
 137:14 151:14 169:16  
 179:5 247:2 257:17  
 266:13 279:7 357:2  
**talked** 32:9 37:16 48:14  
 49:15 53:18 80:12  
 85:1 95:22 108:2  
 112:3 122:20 153:18  
 164:3 177:10 181:13  
 189:14 198:9 211:22  
 253:9 274:6 315:5  
 342:11 366:21  
**talking** 38:14 43:16  
 44:10,22 47:9 48:15  
 54:12 55:2,20 59:9  
 61:1 63:2,21 64:3  
 68:8,10 69:2,7,9  
 72:17,20 84:1 85:20  
 87:15 88:21 89:16  
 93:2 100:9 112:13  
 119:15 121:4,10  
 123:1 125:3 130:22  
 131:9 133:12,17  
 134:6 135:8,8,20  
 137:8,9 152:7 155:2  
 156:21 166:21,22  
 176:8,15 180:16,16  
 180:18 184:2,9 188:5  
 188:5 191:15 195:1  
 200:8 207:5 209:7  
 231:10 269:18 274:16  
 276:22 280:20 284:10  
 291:6 299:7 303:2  
 305:5 340:15 343:17  
 343:18 347:5 356:9  
 356:21 361:5 364:19  
 368:8  
**tandem** 276:13  
**tank** 345:21  
**tanks** 54:5 293:2,3  
**Targa** 87:8,8  
**target** 365:15 366:5,9  
 366:18 379:6  
**targeted** 37:7 168:4  
 211:9  
**targeting** 70:15  
**targets** 366:11  
**tariffs** 248:19  
**tax** 250:18  
**Taylor** 2:19 244:8,8  
**team** 10:13 196:7  
**technical** 305:6 351:1  
 360:16  
**technicalities** 350:15  
**technically** 141:7 217:1  
 298:16 313:11 332:16

359:16 372:11,16  
 373:9  
**techniques** 349:19  
 356:12 362:1  
**technological** 74:21  
**technologies** 30:6  
 48:16 50:1 59:5 66:20  
 66:21 67:10 98:18  
 99:7 105:8 152:4  
 185:11 233:2 234:22  
 235:6 242:20 243:13  
 243:21 261:18 292:8  
 293:13 297:15 305:21  
 338:9 341:1  
**technology** 41:16 43:3  
 43:6,7,9 48:6,17,20  
 49:6 55:21,21 57:1  
 58:13,21 59:9 64:14  
 66:12,14 67:3,4,6,12  
 67:13 70:3 72:1,9  
 74:15 75:21 78:22  
 79:9,11,21 89:9 93:19  
 97:1,6,7,12,17,20  
 99:9,21,22 100:3,17  
 101:18 105:14 106:13  
 107:7 109:3 112:15  
 122:22 172:18 179:4  
 184:3 228:20,21  
 229:16 241:12 242:15  
 245:2,3 249:16 258:4  
 298:19  
**tee** 219:20 285:18  
**teed** 25:17  
**tell** 31:2 72:6 90:2  
 151:22 152:13 169:4  
 214:7 294:9,10  
**tells** 361:5  
**temporary** 227:8,16  
 260:8,9 267:2,4  
 335:22 336:11 337:1  
 337:10  
**tenants** 112:19  
**tend** 80:22  
**Tennessee** 79:4  
**tent** 7:22 140:16 169:15  
**term** 220:18 225:7,10  
 225:16 318:20 355:21  
**terminal** 293:12 347:17  
 369:13  
**terminals** 265:10  
 277:16 291:2 292:14  
 292:17 293:16,20  
 339:8 344:21 368:19  
 368:21  
**terms** 45:6 60:13 73:17  
 83:5,7 127:22 132:20  
 155:12 165:1 176:15  
 176:18,21 192:10,18

193:3 277:2 308:21  
 315:7 330:13 342:17  
 352:2  
**terrain** 67:1  
**terrible** 349:13  
**Terry** 2:2 8:17 122:11  
 124:21 125:1 127:6  
 134:14,15 142:3,18  
 201:14 203:20 217:19  
 334:6 356:6,7 359:21  
 361:14 367:2 374:9  
 376:1  
**Terry's** 126:12  
**test** 99:2  
**testing** 79:18 211:13  
 293:21  
**Tewabe** 10:12  
**Texas** 1:21 62:10 79:3  
 87:7,9 99:17 151:14  
 171:11 172:12 182:15  
 260:21 292:6  
**text** 25:7 123:9 193:22  
 225:9  
**Thailand** 241:16  
**thank** 3:4,6,8 7:1,2 9:18  
 9:19,22 10:12 11:2,14  
 17:9,10,12 18:6 26:5  
 26:16 27:20 28:8 29:5  
 34:5 38:11 39:14 42:3  
 50:9 53:4 55:12 62:3  
 64:8,9,10 66:8 67:15  
 67:17 77:3 80:3 81:6  
 81:7 88:12 90:19 91:2  
 91:16 92:21 94:19  
 98:5 99:14 100:22  
 102:10,11 107:14  
 113:8 120:18 122:10  
 126:8 127:2,19 138:4  
 142:2 143:19 146:20  
 146:21 150:5 151:11  
 153:13 156:3 157:11  
 158:13 161:2,4 162:3  
 163:18 165:8 168:9  
 168:11 169:11,12  
 170:16 172:10 174:13  
 176:10 181:1,2 182:6  
 185:14 186:13 189:18  
 191:11 192:5 194:7  
 197:6,20 198:13  
 204:20 206:18 210:8  
 211:2 212:17 213:11  
 213:12 214:15 218:21  
 219:5 239:19,20  
 241:6,7 244:5,7 245:5  
 245:6 246:4,5 249:4,6  
 251:16,18 252:17,19  
 253:5 255:17,18  
 256:5,6 257:11,14

258:19 260:14,15  
 262:13,15 265:6  
 266:7 267:13 270:7  
 271:3,17 274:10,21  
 276:17 277:9 282:13  
 283:10,19,20 284:13  
 285:11 289:10 295:5  
 301:9 309:6 312:2  
 314:12 316:2,3  
 321:18 329:21 330:16  
 335:7,18 336:12  
 341:16 343:9 345:10  
 347:19 352:19 357:5  
 359:20 370:21 375:10  
 375:17 376:10 378:12  
 378:21 379:16,17,22  
**thanks** 26:21 28:4  
 29:12 42:1,2 44:4,7  
 55:14 62:18,21 69:19  
 71:9 81:9 88:11,18,19  
 101:1 104:8 111:3  
 113:22 114:13 116:5  
 119:12 122:12 124:22  
 127:5,20 128:13  
 130:10 132:6 138:20  
 140:22 144:1 145:22  
 147:3 150:4 155:8  
 156:5 157:10 159:16  
 165:11 178:21 182:8  
 183:2 185:15 187:17  
 189:17 211:4 260:18  
 264:3 266:20 269:15  
 273:20 281:15 282:12  
 284:15 286:3 287:17  
 291:8 292:2 295:16  
 298:22 305:13 306:7  
 306:21 319:3 322:13  
 328:6 338:6 341:18  
 343:11 379:8  
**that'll** 108:13 180:22  
**that's** 5:3,19 12:9 14:10  
 15:6 17:3 33:17 35:3  
 35:18 36:8 38:10 39:4  
 39:7 41:9,11 42:5  
 45:4 47:2,4 48:20  
 49:7,12 50:2 53:13  
 54:15 55:7 58:11,16  
 61:16,21 64:1 65:8  
 66:6 67:8 70:17 71:6  
 73:15 74:17,17,18,18  
 76:2,9,10,22 77:1  
 79:3,19 83:3 87:2  
 90:6 92:16 94:14  
 95:11,13,18,20 96:18  
 97:3,11,15 98:12,21  
 99:11,20 100:14  
 101:14 102:3 106:11  
 106:12 107:9 108:6

109:4 111:12 113:1  
 113:18 114:12 115:17  
 121:7,13 122:2,2,8  
 123:2 126:14 131:14  
 131:22 134:8 146:15  
 149:1 151:4,5 152:6  
 152:19 153:7,22  
 156:8 159:9 160:14  
 164:16,17 166:16  
 167:5 170:14 171:12  
 173:6,22 174:6,12,20  
 176:4,4 181:18 185:8  
 187:13 188:20 189:5  
 190:2 194:6 197:1  
 198:16,18 200:17,21  
 202:7,18 203:3 204:9  
 205:4 208:15 213:2  
 214:2,9,18 216:1,9  
 239:11 242:11 248:10  
 253:7 254:17 262:10  
 263:15,18 264:19  
 265:3,4 269:3 271:1  
 273:18 274:9 275:12  
 276:8,10 279:11  
 281:14 285:9 286:11  
 288:4 289:18 290:14  
 291:17 293:16 295:7  
 295:10 300:2 302:4,6  
 302:7,13,15 306:16  
 307:1,7 308:18 309:3  
 309:13,19 311:18  
 312:16 318:22 320:11  
 320:12 321:15 322:15  
 323:9 325:2,19  
 326:15 329:13,19  
 331:11 338:14 344:5  
 344:9 346:16 351:3  
 351:18 353:6,19,20  
 353:20 354:11 355:16  
 356:3,16 360:9  
 361:11 362:7,10  
 364:5,6,17 368:21  
 369:15,17 370:20  
 371:5,6 372:1,10  
**theater** 263:7  
**theme** 269:17  
**there'll** 270:14  
**there's** 4:13,19 16:21  
 22:20 23:1 26:9 28:21  
 33:4 35:10,15 40:18  
 42:7 47:4 51:11 58:19  
 61:16 65:13 66:17  
 72:5 75:11,15 78:13  
 80:1 83:16 84:21  
 86:16 92:10,12 96:1,2  
 97:4 100:11,15  
 110:22 118:12,13,18  
 118:21 121:1 122:3

122:21,21 123:15,17  
 123:20 127:13 132:20  
 137:5 138:9 143:20  
 146:13 147:22 149:2  
 156:17 158:21,22  
 160:3 165:18 168:3  
 170:5 172:15 175:21  
 180:7,15 181:17  
 183:5 189:5 191:19  
 193:3 194:1,1 200:14  
 201:6 202:12 205:21  
 215:2 239:16 245:12  
 255:7 260:11 262:7  
 273:2 276:3 277:4,15  
 282:7 286:16 291:19  
 294:9,10 298:6 302:1  
 305:11 315:18 316:7  
 318:14 328:14 342:6  
 342:13,16 343:3  
 345:20 346:10 348:1  
 348:17 350:14 351:14  
 357:13 360:14,15  
 361:18 364:21 365:1  
 365:13  
**thereof** 351:9  
**they'll** 67:11 81:5 310:1  
 372:4  
**they're** 4:9 19:4 30:8  
 47:11,18,21 49:3 51:1  
 55:10 56:8 60:19 67:9  
 72:11 89:17 96:13,18  
 112:11 164:9 208:20  
 214:5 251:6 262:5  
 267:5 272:14 276:11  
 279:12 307:10 321:12  
 324:4,6 326:13,20  
 327:1 330:9 331:9,12  
 340:3,5 349:18 355:9  
 356:20  
**they've** 52:2 119:3  
 321:18 357:1 362:22  
**thing** 22:14 46:19 49:10  
 64:16 65:8 68:15  
 72:19 81:10 87:14  
 95:5 96:17 121:21  
 123:2 130:3 158:1  
 161:12 178:2 182:9  
 185:16 215:11 255:2  
 295:8 318:6 326:9  
 331:16 332:6 338:8  
 353:1 357:6 359:2  
 363:10 365:5 378:3  
**things** 16:10 47:5 48:4  
 48:5 49:14,15,20  
 50:15 55:2 66:14 69:9  
 72:15,21 75:9 80:12  
 83:10 96:2,11 98:14  
 103:19 109:4 112:19

113:4 121:13 126:20  
 151:6 177:4,15 189:6  
 189:14 191:5 192:7  
 194:3 263:12 278:2  
 278:15 292:15 304:22  
 310:19 353:6 355:9  
 362:22 365:21 367:5  
 368:9  
**think** 10:21 16:11 31:21  
 36:2 37:10,15 38:1  
 39:4 40:5,11,19 41:13  
 43:2,13,21 44:3,22  
 46:9,19,20 48:12,22  
 49:2,4,8,12,19,21  
 50:3,17,19,20 51:13  
 54:10,22 55:1,7,15,17  
 56:14 58:9,20 59:6,14  
 59:18 60:5,10,14  
 62:22 64:5,12,16  
 65:12,15 66:6 67:18  
 67:22 68:3,7,15 69:8  
 69:10,21,22,22 70:14  
 71:12 72:20,22 73:2  
 73:19 75:2,12 76:2  
 77:9,12,16 78:7,9,19  
 78:22 79:13 80:1,14  
 81:10 82:22 83:5 86:8  
 86:19 87:4,14 88:6  
 89:18,21 90:6 91:9,11  
 91:13 92:3 93:4,13,20  
 93:22 94:6,9,13 95:2  
 95:5,8,13,19 96:18  
 97:3,13 98:9,12,16,22  
 99:1,17 100:2 102:1  
 103:18 104:9,16  
 105:17,19 106:6,10  
 108:1,13,16 109:4,17  
 109:20 110:4,6,22  
 111:4,7,12,13,22  
 112:6,9,13,16,18  
 113:6,10,17,19 114:6  
 114:7,11 115:5  
 116:12 117:3,20  
 118:5 120:2,16,21  
 121:21 122:6,7,8,14  
 123:14,18 124:9,15  
 125:4,14,20 126:5,20  
 127:7,17 129:20  
 130:3,13 131:2 132:7  
 133:10,11,16 134:2,7  
 134:9,12 135:4 137:1  
 137:3,14,16 139:8,11  
 139:14 140:10 145:5  
 146:2,15 147:5 148:5  
 148:11,16 149:2,8,17  
 150:7 152:6 153:18  
 153:22 154:6,11  
 156:8,17 159:17,22

160:15 161:7,17,19  
 162:1,11,15 163:9,20  
 163:21 164:1,5,11,18  
 165:5,13 167:9,13,18  
 167:21 168:7,20,22  
 169:14,16,18,22  
 170:8,19 173:13  
 174:3,20,20,22  
 176:16 177:4,9,15,16  
 177:17,20,21 178:2,5  
 178:10,12 183:3,7  
 186:9 187:10,11  
 188:21 189:15 190:2  
 190:3 193:8,13,16  
 194:5 197:1,11 198:5  
 198:14,16,21 199:17  
 199:18 200:21 202:13  
 202:20,21 203:17,22  
 204:5,8 205:8,10  
 206:14,19,21 207:8  
 208:3,6,9 210:12,13  
 210:14 211:1 212:6  
 212:14 213:15 214:4  
 215:19,21 244:18,20  
 252:14 253:7 262:16  
 264:5 268:4 269:19  
 270:3,18,22 271:7,8  
 271:11,20 272:7,13  
 273:1,4,9,16 274:2,9  
 274:18,18 275:9,12  
 275:19 276:10,14,19  
 277:1,5 278:18 279:9  
 279:19 280:6,16  
 281:2 282:17 283:21  
 284:17 285:6,10,19  
 286:4,14 287:6,7,8,19  
 288:4,11,14,16,21  
 289:12,15,18 290:1,1  
 290:5,12 291:6,17,20  
 295:7 296:3,8,13  
 299:2,6,17,18 300:3  
 300:16,18,20 301:14  
 301:18 302:1,2,7,12  
 302:12 303:1,22  
 304:7,13 305:19  
 306:10,11,16 307:3,4  
 307:16 308:5 309:8  
 309:16,19 310:14  
 311:1,3,9,13 312:20  
 313:6 315:2,7,18  
 316:12 317:13,18  
 318:2,11,19 319:5,22  
 320:13 326:19 327:6  
 327:7 330:12,19,20  
 331:13,15,16 335:10  
 336:8 337:6,8 338:19  
 339:6,14 340:22  
 341:19 342:13,15

345:1,2,3,7,18 346:5  
 347:20 348:1,5,12,16  
 349:12,22 350:2,8,13  
 350:16,17,17,20  
 351:5,10 352:5,10,16  
 352:22 354:4 355:14  
 355:21 356:9 357:6  
 357:11,14,20 358:8  
 358:14,17 361:4,11  
 361:12 362:3,14  
 363:5,6,8,20 364:11  
 364:14,21 365:12,13  
 366:6,17,19 367:7,13  
 367:19 368:3,9,14,14  
 370:11,16,19,19  
 371:6,10,14,16,19,20  
 372:2,10 377:12  
 378:15  
**thinking** 42:6 46:16  
 69:2 82:8 85:19 87:20  
 93:11 98:15 109:18  
 110:15 117:21 118:8  
 118:19 122:15 129:21  
 132:18 136:3 182:10  
 182:14 185:17 194:4  
 206:13 213:19 214:10  
 216:4 274:22 282:7  
 286:5,19 297:13  
 298:2 302:20 324:17  
 343:4  
**thinks** 291:12  
**third** 37:21 51:20  
 198:15 242:3 301:21  
 306:10 321:17  
**thought** 26:9 29:7  
 34:11 87:3 106:4  
 110:7,21 122:13  
 125:2 145:5 164:11  
 192:19 206:22 207:22  
 263:4 279:9 287:14  
 291:21 292:1 317:8  
 319:6 326:10 327:22  
**thoughtful** 199:3  
 379:17  
**thoughtfully** 47:9  
**thoughts** 75:13 109:7  
 126:14 162:10 203:12  
 269:13 325:1 339:22  
**thousands** 210:18  
**threat** 48:19  
**threats** 48:14  
**three** 6:1 11:14 47:3  
 50:15 51:6,8 63:14  
 80:18 110:13 119:2,7  
 130:4 134:3 228:7  
 246:14 268:16,18,19  
 269:6 296:17 297:3  
 299:19 313:22 341:8

345:19  
**three-to-five-** 130:6  
**threshold** 45:16 78:15  
 119:8 124:16 292:19  
 292:20 360:14  
**thresholds** 79:12 292:8  
**throw** 201:15 360:4  
**throwing** 71:18,19  
**Thursday** 14:21  
**tie** 218:18 302:3,10  
**tied** 195:3  
**tier** 78:12  
**tighter** 119:21  
**Tillman** 10:8  
**time** 3:10,12 7:19 13:6  
 13:16 14:5,6,8 17:21  
 26:9 29:13,13 39:20  
 41:14 43:17,21 51:17  
 51:20 54:2 58:20 61:1  
 61:15 66:11,19 67:5  
 72:18 76:18 82:14,20  
 87:17 88:15 89:19  
 92:3,13 96:19 100:2  
 102:9 105:13 108:10  
 108:10 111:10 112:10  
 112:12 117:11,14  
 121:5,20 131:12  
 144:19 152:7 183:18  
 189:2 196:15 201:22  
 202:18 223:13 224:21  
 246:3 281:12 296:16  
 306:13 310:11 332:9  
 338:12 342:12  
**timeframes** 259:8  
**timeline** 42:7 76:17  
 113:12 117:3 193:4  
 214:11 296:21 297:2  
 301:16 302:21 303:13  
 303:19 308:22 309:4  
 311:10 312:14  
**timelines** 28:18 43:3  
 50:6 71:17,21 72:6  
 73:22 93:8,12 106:3  
 106:15,20 108:20  
 109:2 122:19 125:19  
 126:1 137:2 139:4  
 228:15 238:4 296:12  
 296:14 299:8,12  
 300:15 308:10 310:4  
 311:3 313:22 333:3  
**timely** 110:11  
**times** 53:18 57:17 74:5  
 110:19 118:4 133:2  
 234:15 257:20 258:11  
 286:9,10  
**timing** 60:11 61:1,20  
 72:18  
**today** 4:1,3 6:2 10:6

14:15 37:12 43:7  
 74:17 89:17,21 106:6  
 109:5 125:16 130:19  
 148:8 149:21 181:8  
 181:13 182:3 238:19  
 241:21 242:11 246:3  
 262:3 280:9 301:4  
 349:8 351:21 362:5  
 375:15  
**told** 48:18  
**tomorrow** 66:15 99:19  
 100:10 219:13,16  
 375:12 380:3  
**ton** 338:9  
**tonight** 336:9  
**tons** 12:2  
**tool** 146:12 157:6,6,17  
 158:17 179:17,17  
 180:6 181:16,18  
 186:20 187:20 193:22  
 340:13  
**tools** 47:8 50:4 76:10  
 76:10 78:19 79:22  
 94:6 115:8 120:12  
 166:7 181:17 186:4,9  
 187:22 193:20 204:14  
**top** 45:8 65:6 108:22  
 121:4,12 269:9 293:3  
 297:10 298:14 315:9  
 364:13  
**topic** 17:13 170:4  
 176:14 251:10 259:20  
**topics** 263:16 268:18  
 269:7  
**topography** 31:16 63:8  
**total** 16:12 22:1 37:5  
 45:2 52:13 84:10,20  
 100:3,14 121:12  
 160:6 247:14 261:1  
**totally** 58:4 90:18 268:4  
 305:16 354:21 365:1  
 369:21  
**tough** 79:20 133:4  
 273:4  
**town** 213:2,3 232:10  
**toxic** 221:18  
**track** 49:3 255:12  
 305:16 319:8,19  
**tracked** 214:1  
**traction** 175:18 176:7  
**trade** 234:20 236:3  
**trades** 222:22 224:5,13  
 224:19 225:5,8  
 226:17 227:6,9  
 228:19 229:10 230:14  
 230:20 231:2,21  
 232:16 237:2  
**traditional** 183:10

240:15  
**trains** 293:8  
**tranche** 99:4 159:4  
**Transco** 30:2  
**transcript** 5:21 7:11,20  
 365:2  
**transcripts** 7:12  
**transferring** 344:6  
 346:3 352:13  
**transmission** 1:17  
 12:13 19:1,16 20:21  
 21:9 22:11 23:17 30:2  
 30:4,15,17 31:14,17  
 33:17,18,20 34:3  
 35:11,12 37:1,3 47:1  
 47:18 49:16 51:5 56:8  
 58:2,5 59:10 64:18  
 68:18,19 69:1,5 70:21  
 71:1 95:11 96:12  
 110:18 118:2 119:19  
 121:7 128:16 132:15  
 132:16 151:4,5 157:8  
 158:3,5 166:3,11  
 171:17 176:2 179:3,8  
 182:1,5 183:14,17  
 184:1 188:6,8,9 209:9  
 209:19 211:19 212:16  
 225:22 226:5,20  
 230:2 234:16 236:20  
 238:6 241:17,22  
 244:18 245:15 254:10  
 254:12 260:1 265:1  
 269:18 270:20 278:4  
 278:5,11,13 279:8,11  
 279:21 282:1,4,11  
 283:1,5 285:2,7 286:8  
 288:3 289:4,14 290:2  
 298:5 305:21 308:13  
 313:18,21 314:2,10  
 333:2,5,12 336:5  
 337:8 338:2,11  
 340:18 341:1,5,12  
 343:15 345:4 354:14  
 356:12 361:16 362:1  
 366:22 367:4,6 369:1  
**transmitted** 178:18  
**transparency** 166:20  
 174:19 181:11,20  
 187:13 191:4 192:8  
 205:2 238:15  
**transplant** 365:22  
**transport** 242:16  
**transportation** 1:1,14  
 2:8,9,11,12 3:22 7:6  
 237:13  
**transported** 221:19  
**transporting** 233:20  
 234:2,7 235:2 237:20

**traveling** 3:9  
**tread** 96:5  
**treated** 255:9  
**treating** 242:12  
**trending** 125:5  
**trends** 238:22  
**tried** 41:2 101:7  
**triggers** 305:2  
**trip** 262:11  
**tripled** 307:11  
**Tristan** 4:2 379:2  
**trivial** 166:9,16 354:19  
**trouble** 283:22  
**truck** 262:10 283:17  
**Truckee** 248:7  
**true** 164:12 175:4  
 219:21  
**trunk** 31:10  
**trust** 2:15 187:8 192:9  
 205:2 228:2 229:14  
 235:17 238:10 257:17  
 296:16  
**try** 14:4 15:4 29:15  
 37:11,12 65:20 79:16  
 80:2 91:8 107:18  
 121:18 125:13 127:8  
 128:14 129:15 136:7  
 144:18 170:20 187:18  
 196:9 204:13 255:16  
 278:3 319:18 354:13  
 356:11 376:20  
**trying** 32:12 39:19 41:9  
 42:4 44:1 64:16 65:8  
 70:1 75:12 76:5 77:10  
 77:16 89:12,14 90:8  
 95:3 102:8 103:16,20  
 105:12 109:16 114:6  
 121:8 124:10 125:6  
 126:8 129:3,4 150:8  
 150:21 155:12 161:8  
 168:18 173:14 174:11  
 174:17,18 176:8  
 181:5 184:16 190:7  
 190:14 191:7 201:4  
 202:6 206:13 209:1  
 215:19 264:5 268:20  
 277:6 280:18 282:9  
 284:16 285:13 286:13  
 288:12 290:9 300:10  
 300:16 302:5,9  
 304:20 311:8 315:8  
 319:15 323:12 325:3  
 327:3,8,11 328:11,22  
 330:22 347:13 354:12  
 357:2 366:22 367:6  
 377:12 378:1,10  
 379:5  
**Tuesday** 14:17

**turn** 4:10,13 9:21 10:14  
 10:17,22 15:13 18:4  
 26:14 91:15 112:8  
 189:12 205:17 219:19  
 239:14  
**turning** 288:10  
**Turpin** 2:2 8:17,18  
 124:22 125:1 134:15  
 134:15 142:3,18,19  
 201:15 217:19,20  
 334:6,7 356:6,7,7  
 359:21 374:9,10  
**Turpin's** 129:15  
**tweaks** 368:17  
**twice** 110:19 118:5  
 226:16 262:11  
**two** 5:14 6:1 11:13  
 26:11 29:1 40:7 47:5  
 50:17 63:14 66:10  
 72:15,21 74:8 79:15  
 80:5 107:19 121:11  
 126:1 137:22 164:19  
 177:4 186:19 192:7  
 197:13 198:17 204:7  
 246:15 268:10 276:10  
 277:14 278:14 280:19  
 282:5 283:4 286:10  
 313:18 314:4 318:5  
 319:8,19 335:20  
 356:10  
**tying** 254:13  
**type** 18:19 19:3,6,7,8,8  
 19:18,18,19,20 20:3,5  
 20:9,15,16,19 21:2,3  
 21:5,5,7,8,9,14,22  
 22:1,6,9,12,15 23:3,7  
 24:13 25:6,16,20,21  
 26:1 27:5 28:16,20  
 32:18,20,22 34:1,4,7  
 34:9,11,12 35:15,18  
 35:19,21 36:1,11,12  
 38:1,3,14 39:1,4,8  
 40:10,15,17,18,20,22  
 41:6 42:8,12 43:17  
 45:2,6,17 50:12,22  
 53:2 56:20 60:2,17  
 62:13 68:21 71:22  
 81:17,21 82:22 83:3  
 83:13,15,18 84:7,8,9  
 84:13,15,16,16 85:5  
 85:14,22 86:6,11,12  
 86:15,22 87:22 88:5  
 90:3,3 93:3,14,21  
 94:2 95:12 100:6,9,12  
 102:5,6 103:1 104:12  
 104:21 105:6,18  
 108:3,11,20 109:19  
 109:22 110:2 115:14

116:3,10,12,15,19,20  
 123:6,11 127:18  
 128:20 129:1,22  
 130:1 132:8 138:22  
 139:15,16,18,21  
 140:6 141:6,12,13,20  
 144:12,13,13,22,22  
 145:1,10 149:5,7,12  
 149:13,19 151:22  
 152:1,1,12 158:1,4  
 160:3 162:15 163:4,7  
 163:16 169:9 171:17  
 172:4 190:5 195:4  
 197:2,4 209:17  
 210:14,15,15,22  
 211:18 214:4,9  
 216:22,22,22 237:18  
 265:21 292:7 303:7  
 308:13 362:11  
**types** 25:2,4 27:3 51:16  
 53:10 59:16 89:5  
 164:21 165:2 181:21  
 211:14 280:20 300:22  
 339:12 352:16  
**typically** 31:7 56:6  
 279:10

## U

**U.S** 1:1,20 11:22 195:19  
 242:4 259:13 301:12  
**U.S.C** 24:18 25:5,7  
 220:14,17 223:5,16  
 223:21 231:1  
**Uh-huh** 325:6  
**Ukraine** 307:13  
**ultimate** 43:5  
**ultimately** 113:15 153:8  
 154:4 164:18 193:17  
**unable** 205:7  
**unanimous** 91:12  
 143:17 197:9 199:5  
 212:14 375:8  
**unblended** 235:2,7,15  
**uncertainty** 73:9  
 127:13 325:4  
**unclear** 328:8  
**uncomfortable** 310:8  
**unconventional** 133:16  
**undecided** 129:14  
**undergoing** 355:16  
**underground** 12:14  
 224:1 279:22  
**underlying** 243:16  
**underscore** 171:9  
**understand** 42:5 44:9  
 44:11 47:7 55:16 60:7  
 67:22 72:17 74:5,14  
 94:7 101:9 108:10

116:7 117:20 127:8  
 128:1,9,10 134:16  
 137:7 162:19,21  
 164:19 167:19 174:17  
 184:11,17 185:21  
 190:7 198:19 215:12  
 280:19 299:5 303:18  
 309:12 317:3 327:11  
 327:16 330:19 345:2  
 345:8 346:14 351:8  
 352:10 353:18 354:22  
 357:3  
**understanding** 41:11  
 42:16 68:4 82:2,17  
 83:7 113:9,13,17  
 116:16 148:10 161:8  
 161:19 177:3,12  
 185:17 194:20 264:8  
 264:20 265:18 272:1  
 279:4 283:22 307:4  
 310:6 329:11 338:18  
 343:6 377:13  
**understands** 43:19  
**understood** 86:19  
 101:17 122:14 128:3  
 173:19 309:2 364:9  
**undertake** 250:14  
**undertaken** 185:19  
**unfortunate** 188:7  
 279:19  
**unfortunately** 64:6  
**uniformly** 229:12  
**unintended** 74:2,6  
 161:13 242:12  
**unique** 232:18 250:16  
 251:1 257:18 259:6  
 303:3 347:21 348:3  
 348:15,20 350:5  
 352:7 353:13 355:8  
 357:7 358:10 359:18  
 360:6 362:9 363:21  
 366:10 368:5,17  
 370:5 373:11 379:12  
 379:13  
**unit** 2:3 38:8 141:19  
**United** 1:18 32:8 57:10  
 66:2 79:7 82:16 97:9  
 208:13 241:16 260:22  
 261:3 349:16  
**universally** 83:13  
 244:19  
**universe** 162:9  
**University** 1:14,19,21  
 99:17 151:14 172:12  
 292:6  
**unknown** 20:4  
**unnecessary** 168:7  
 227:7 229:2 254:2

260:4,8  
**unreasonable** 229:3  
**unregulated** 149:13  
**unsafe** 226:15  
**update** 231:7 247:18  
**upshot** 17:4  
**upstream** 265:22  
**urban** 252:8  
**urge** 233:5 249:13  
 250:7,17  
**urged** 224:13,20  
**use** 15:22 30:6 47:15  
 48:17 56:4 67:4,9,11  
 80:2 89:13 147:10  
 162:10 166:7 172:22  
 180:8 225:18 227:12  
 235:20 238:2 247:17  
 258:6 306:3 310:3  
 311:19 318:20 340:11  
 344:2 349:4  
**useful** 153:8 157:21  
 243:3  
**uses** 157:19 188:18  
 225:15  
**utilities** 1:13,16 2:1  
 3:22 7:6 191:14 279:6  
 283:13  
**utility** 156:9 195:16  
 375:20 376:8

## V

**vague** 225:6  
**valuable** 138:10 279:15  
**value** 78:5 90:19 149:11  
 175:20 222:15  
**value-added** 234:7  
**valves** 343:20 344:8  
**vaporization** 259:3  
**variability** 183:6  
**variation** 92:22  
**varies** 279:19  
**variety** 181:11 243:1  
**various** 32:19,21 35:21  
 125:17 259:1 273:5  
**vast** 66:1 101:12 249:21  
**vastly** 70:22  
**vegetation** 234:8  
**velocity** 243:6  
**vendor** 231:16 237:13  
**vented** 342:4  
**venting** 12:20 13:12  
 54:5 224:16 346:2  
 369:7  
**verification** 211:13  
**version** 192:16  
**versus** 52:18 171:19,20  
 173:22 189:22 191:9  
 252:13,17 253:9

281:1 284:12 286:14  
 352:9  
**vertical** 113:2  
**vessel** 346:2  
**vetted** 108:8  
**view** 40:11 145:15  
 205:13 272:13 273:19  
 318:12 350:9 356:2  
**Viewer** 154:5 158:22  
**viewing** 171:14 182:12  
**vigorous** 273:14  
**viii** 248:11  
**violate** 98:6  
**Virginia** 1:11  
**vital** 259:4  
**voices** 378:16  
**volume** 33:7 34:7 36:7  
 37:5 52:1 54:14 70:3  
 70:12,19 71:8 81:1  
 133:13 209:8 224:22  
 336:7 338:3 342:8  
 344:14,22  
**volumes** 81:5 103:20  
 345:21  
**voluntarily** 85:7,12 86:3  
**vote** 13:11,11,17 14:2  
 17:21 26:11 90:5 99:2  
 126:10 127:18 130:12  
 131:13 136:14 141:1  
 142:5 167:10 197:9  
 197:11,12,15 200:3,3  
 200:4,15,16,22 201:8  
 206:1,5,7,13,19  
 207:20 208:10 214:21  
 215:10,14,15,18,22  
 216:2,5 217:6 218:18  
 268:19,22 308:16  
 314:15 316:9 333:15  
 338:16 360:2,18,18  
 361:1 362:12 365:8  
 366:13,15 368:13,18  
 370:1,2,11,16,22  
 371:15 372:13,13  
 373:19  
**voted** 124:15 212:11  
 216:6,14 317:13  
 319:13  
**votes** 138:22 199:5,22  
 212:14 268:10 270:4  
**voting** 76:7 91:5 92:18  
 138:11 159:8 161:18  
 199:2,9 200:1 205:22  
 208:1 215:13 360:20  
 361:17

## W

**W** 1:20  
**wade** 148:17 149:21

|                               |                               |                             |                               |
|-------------------------------|-------------------------------|-----------------------------|-------------------------------|
| <b>wading</b> 307:1           | 275:22 295:5 303:2            | 102:5,7 106:2,3,17          | 125:14 128:8 136:2            |
| <b>wait</b> 103:15 143:20     | 304:19 320:10,15              | 109:6 111:8 114:7,20        | 146:12 152:7 153:18           |
| 287:15                        | 328:3 351:20 377:18           | 117:11 119:15 120:3         | 159:10,11 160:1               |
| <b>waiting</b> 92:9 313:1     | <b>wanting</b> 279:7 358:6    | 121:17,18 123:1             | 165:19 166:2,5,6              |
| <b>walk</b> 29:8 55:18 92:14  | <b>wants</b> 173:7,8 297:15   | 124:10,13 125:4,6,9         | 175:4,10 177:9,10             |
| 178:4                         | <b>warming</b> 257:20         | 126:7,8,9 127:10,22         | 181:13,13 182:1               |
| <b>walking</b> 56:15 149:11   | <b>warrant</b> 146:14 242:18  | 128:9,10,18 129:3,4         | 185:3,3 187:21 188:9          |
| <b>walks</b> 47:15 104:1      | <b>Washington</b> 1:13 3:9    | 130:13,22 131:2,9           | 188:10 194:22 198:8           |
| <b>wand</b> 293:1,7,10        | 3:22 7:6 186:15,18            | 133:12,17,18,20             | 207:5 257:8 263:17            |
| <b>want</b> 15:3 18:2 30:11   | 281:4 379:7                   | 134:6 135:7,20 136:3        | 274:2 280:8 286:18            |
| 32:10 33:9 36:18              | <b>wasn't</b> 103:10 125:3    | 136:5,7 137:7,9,14          | 290:7 312:20 315:6            |
| 49:21,22 50:13 53:6           | 134:11 157:13 311:11          | 139:17 150:8,21             | 319:15 345:4 348:6            |
| 54:19 57:4 60:10 62:1         | <b>waste</b> 254:2            | 155:2 156:21 157:2          | 348:21 351:9 357:11           |
| 63:1 64:11 67:14,21           | <b>wasteful</b> 234:10        | 161:8,21 164:14             | <b>web</b> 31:15 32:7 34:20   |
| 68:1 72:14 73:9 75:3          | <b>waterfront</b> 310:18      | 166:20,22 168:18            | 120:7                         |
| 77:21 78:2,2 80:1,5           | <b>way</b> 32:12 33:19 36:17  | 169:6 173:14 174:4,5        | <b>webpage</b> 6:3            |
| 83:15 85:3 88:20 89:7         | 46:16 53:16 75:7,21           | 174:11,17 175:13,22         | <b>website</b> 7:14 180:7     |
| 90:9 92:15 93:13,16           | 76:21 80:14 89:3              | 176:8 177:6 178:13          | <b>Wednesday</b> 14:18 15:1   |
| 95:7,9,17 98:2,6,10           | 90:11,18 102:8,8              | 180:15,16,18 181:5          | <b>weeds</b> 372:1            |
| 100:16 108:6 109:8,9          | 119:21 120:14 123:8           | 184:17 188:5,5 189:4        | <b>week</b> 4:5 14:11 15:6    |
| 113:15 120:5 121:3            | 124:3,7 125:1 126:14          | 189:7,8 194:4 195:16        | 126:7 253:10 377:20           |
| 123:20 136:13,21              | 129:4 130:20 135:17           | 195:21 199:2,13,20          | 378:1                         |
| 144:17 149:21,22              | 135:22 136:11 154:10          | 200:8 202:6 203:10          | <b>weeks</b> 6:1 63:14 121:11 |
| 151:8 153:9,10 154:8          | 176:19 186:2 190:18           | 203:16 204:11,12            | <b>weigh</b> 126:15 145:14    |
| 155:4 161:20 162:18           | 192:17 193:14 195:2           | 205:10 208:9 216:1          | 186:15                        |
| 162:21 163:11 164:4           | 199:21 200:14,16              | 220:5 247:8 248:1           | <b>weighing</b> 111:17        |
| 164:8 165:12 168:19           | 201:1 202:16 205:20           | 264:7 266:13 270:13         | <b>weird</b> 370:9            |
| 169:14 171:6 172:7            | 208:5 213:9,22 246:9          | 277:4,17 280:20             | <b>Weisker</b> 2:3 8:19,20    |
| 176:12 179:5 186:15           | 255:6 276:22 282:20           | 281:13 283:21 285:19        | 142:20,21 169:22              |
| 187:3,4 194:11 195:6          | 302:2 303:10 322:17           | 288:10 289:18 290:1         | 170:1 217:21,22               |
| 201:15 202:2 205:15           | 330:2 346:11 347:7            | 290:15 291:6 295:13         | 282:15,15 305:18,18           |
| 206:3 207:1,13                | 349:19 352:6 353:20           | 297:19 299:6 300:16         | 334:8,9 337:5,5,14,17         |
| 209:11 211:6 214:19           | 369:14,22 371:10              | 301:6 303:1,2 305:5         | 372:6,6 374:11,12             |
| 215:6,10,11 216:8,10          | 375:18 377:15 379:11          | 305:21 311:7 317:2          | <b>welcome</b> 11:7           |
| 240:1,5,10 244:13             | <b>ways</b> 74:13 132:9       | 317:18 318:2,4,8            | <b>welcomed</b> 261:12        |
| 252:9 256:5,8 257:17          | 192:16 242:17 251:14          | 323:12,13 324:8             | <b>welcomes</b> 244:4         |
| 258:16 270:10,11              | 342:14                        | 327:7,8 330:20,22           | <b>WELDEMICAEL</b> 2:13       |
| 274:13 276:2,14,15            | <b>we'll</b> 8:2,8 11:10 13:5 | 331:16 335:10,15            | <b>well-developed</b> 242:22  |
| 276:20 277:12 278:18          | 18:2 67:3 71:3 91:18          | 338:10 340:15 341:9         | <b>well-established</b> 182:2 |
| 281:7,8,12 283:14             | 114:15 117:7 159:9            | 341:14 343:17,17            | <b>well-informed</b> 96:6     |
| 287:7 292:9 295:9             | 197:17 214:21 220:8           | 347:4,9,11,12,13            | <b>well-suited</b> 30:9       |
| 297:17,18 301:11              | 231:7 380:2                   | 348:12 349:19 353:16        | <b>wells</b> 154:14,16        |
| 303:17 305:1,10               | <b>we're</b> 11:10 14:22 15:2 | 354:11,20 356:9             | <b>went</b> 62:10 91:21       |
| 307:6 309:3 311:19            | 17:13,15 18:12 22:22          | 357:2 361:5 362:2,4,5       | 114:18 144:4 166:12           |
| 318:5,17 321:13               | 26:6,8,10 29:17 30:13         | 365:12,17,22 366:1          | 196:15 219:7 281:5            |
| 324:5 327:11 328:8            | 31:21 35:2 37:2 44:22         | 366:20 367:6 368:9          | 340:9 380:6                   |
| 335:17 336:21 338:4           | 46:18 48:18,22 49:1,5         | 370:10,10,12 371:7          | <b>weren't</b> 58:3 78:1      |
| 338:8 339:4,11 340:6          | 53:14,22 54:12 55:9           | 371:10 378:15 380:2         | 137:21                        |
| 340:8 345:13 347:16           | 55:20 60:22 63:2,21           | <b>we've</b> 12:10 13:10,20 | <b>west</b> 33:19             |
| 348:4 358:2,9 367:11          | 64:3,16 65:8,12 66:6          | 14:3 18:13 21:1 27:14       | <b>Westin</b> 1:10            |
| 369:5 371:16 375:16           | 68:9 69:3,4,7,9,13            | 27:18,19 32:11,19           | <b>what's</b> 55:22 56:3 71:5 |
| 376:10,12 378:12              | 70:1,17 71:6,6 72:17          | 41:2 43:8 47:8 49:15        | 76:5 101:9 107:4              |
| <b>wanted</b> 44:8 45:9 48:17 | 72:19 75:4 76:13 77:9         | 61:3 63:12 64:5 66:4        | 111:11 122:22 146:17          |
| 59:12 81:21 83:22             | 79:8,16 84:1 86:17            | 70:4 75:20,20 82:16         | 158:18 173:14 201:9           |
| 86:16 126:15 128:1            | 87:15 88:14 89:11,12          | 85:4 86:10 89:11            | 255:2 265:12,13               |
| 181:4 197:22 204:18           | 89:14,16 90:8,10,17           | 90:10 92:4 93:2,8           | 280:6,14 285:20,21            |
| 245:11 246:1 247:2            | 91:11 92:1,9,18 95:3          | 95:22 101:7 103:15          | 285:21 287:20 288:8           |
| 253:5,11 254:18               | 96:11 97:12,16 98:15          | 110:7,12 121:4,10           | 324:8 341:20 342:17           |

343:7 346:13 356:16  
 356:17 370:3 371:4,5  
**wheel** 263:9  
**Where's** 174:19  
**Whew** 103:15  
**who's** 10:9  
**wide** 118:17 129:4  
**widely** 56:4,10  
**wildly** 366:2  
**WILLIAM** 1:18  
**Williams** 2:4,19 29:6,19  
 30:22 32:5 33:14  
 34:18 40:4 45:13 53:9  
 62:22 69:20 88:18  
 101:2 102:21 107:14  
 114:1,11 119:13  
 127:5 128:14 130:11  
 135:2 137:13 139:8  
 146:1 156:6 165:11  
 178:22 183:2 187:18  
 211:5 239:20,22  
 269:16 273:21 277:12  
 279:18 281:16 284:15  
 287:18 291:9 299:1  
 306:22 317:1 319:4  
 322:7 338:7 343:12  
 346:19 349:2 361:10  
**willing** 113:11 287:21  
 335:9,14 359:8  
**Wills** 2:20 241:8,9  
**Wilson** 10:11  
**wind** 190:18  
**window** 377:4  
**winner** 375:22  
**wintertime** 277:22  
**wise** 157:15  
**wish** 8:1 379:20,21  
**wishes** 4:1,4 219:1  
**withdraw** 372:22  
**withdrawing** 373:3  
**women** 376:4  
**Women's** 377:21  
**won't** 16:13 130:3  
 173:12 205:22 342:15  
**wonder** 92:5 130:5  
 137:5 199:11 200:15  
 285:14 311:19 330:22  
 346:10 350:10  
**wondered** 27:1  
**wonderful** 3:10  
**wondering** 118:18  
 158:7 172:14 182:19  
 193:2 205:5 346:16  
 351:19  
**word** 76:14 108:19  
 214:2 321:6 353:2  
**worded** 352:6  
**wording** 125:3 206:8

346:15  
**words** 72:5 285:18  
 363:16 364:22  
**wordsmith** 348:11  
**wordsmithing** 289:5  
**wordy** 325:19  
**work** 10:13 12:19 13:3  
 13:4,8,8,10 14:9,19  
 15:5 37:11,13 40:6  
 47:10 59:22 66:15,15  
 72:9 75:17 79:3,4,12  
 86:7 90:4 93:5 94:10  
 97:8 101:21,22 102:2  
 102:8 112:15 114:7  
 117:13 134:3 135:14  
 135:18 152:13 153:10  
 154:6 162:16 165:6  
 168:4 198:3 254:13  
 256:4 271:1 278:5  
 282:10 285:6 290:5  
 293:19 294:14 300:13  
 304:2 336:9 338:9  
 345:4,7 347:6 354:16  
 369:1 375:17 376:1,2  
 376:11 379:19  
**workable** 112:20  
**worked** 304:8 341:8  
**working** 10:19 54:1  
 75:14 108:6,12 240:8  
 254:22 256:6 257:12  
 340:3,5 343:7 347:9  
 362:2 377:3,8 378:6  
 378:19  
**works** 72:9 90:7 198:6  
 309:22 330:2  
**world** 94:16 241:15,18  
 243:4 261:16 277:18  
**world's** 241:13  
**worlds** 277:14  
**worried** 164:3 175:22  
 184:18 290:11 317:2  
 360:8  
**worries** 132:6  
**worry** 275:17 324:15  
**worrying** 67:13  
**worth** 107:9 108:12  
 129:19 189:7 214:8  
**worthy** 146:15  
**would've** 17:5 18:20  
 70:8,12 307:14  
**wouldn't** 44:2 96:17  
 202:21 209:15 273:12  
 287:13  
**wow** 3:5 367:1  
**wrench** 360:5  
**write** 125:7  
**written** 5:17 125:2  
 167:15 248:10 255:6

353:20  
**wrong** 44:22 144:21  
 317:19  
**Wyoming** 33:15,16 34:1  


---

**X**  


---

**Y**  


---

**yard** 162:20  
**yeah** 11:8 26:21 27:12  
 29:11 41:22 42:18,19  
 44:19,19,19 62:21  
 67:17 69:20 92:9,17  
 92:21 101:5 102:16  
 102:19,21,21 107:17  
 111:3 114:1 124:6,17  
 124:20 131:22 135:2  
 136:17 137:12,20  
 138:5,9 139:8,13  
 151:9 153:15 157:12  
 162:6 163:20 185:15  
 192:7 193:11 198:14  
 199:1 206:12 207:15  
 209:13 210:3 212:20  
 215:9 216:4 220:5  
 239:11,12 263:15,18  
 265:15 266:21 269:16  
 270:21,21 276:18  
 279:17,18 284:12,14  
 286:4 287:18 288:6,7  
 289:9 291:19 295:4  
 297:8,12 298:12  
 299:1 300:2,6,10,16  
 302:22 303:21 304:20  
 306:9 308:4,6,8  
 310:12,16 315:18  
 316:2,15,22 317:1  
 318:2 319:4 320:1  
 321:18 322:6 323:17  
 324:10,13 325:2  
 326:7 327:15 329:18  
 329:22 332:8 335:19  
 337:15 340:7 343:12  
 346:18 347:19 349:1  
 350:3,13 351:16  
 355:5,13 357:20  
 360:11 361:3,9,10  
 368:12 370:8  
**year** 28:1 61:4,14 74:17  
 78:18 110:19,19  
 116:19 118:4,5,6,17  
 130:7 131:17 132:15  
 134:18 135:7,15  
 141:21 160:9 171:22  
 226:17 234:16 247:11  
 284:17 286:9,10  
 304:7 306:12 308:3  
 309:10,11 310:10

314:5 333:7  
**years** 49:11 51:8 54:8  
 63:12 70:7 74:18,19  
 78:14 79:19 80:18,19  
 82:12 100:7,11,20  
 110:6,9,12,13 111:15  
 118:22 119:2,7,15,19  
 119:20 120:12 128:11  
 130:4 131:9,12 133:7  
 134:2,20 135:3,6,16  
 137:4,8,9,17,22 161:6  
 172:18 181:7 186:15  
 188:10 189:9 225:1  
 242:1 256:16,18  
 257:3,5,21 281:4  
 341:4,8 376:15  
**yep** 34:14 155:21 265:7  
 289:17,18  
**yesterday** 66:15  
**yield** 114:4 125:14  
 196:3  
**York** 1:15 79:6 223:10  
 226:12 232:8 237:10  
 286:17 295:8 377:7  
**you'll** 3:12 30:19 33:21  
 35:14 36:1,10 135:13  
**you're** 4:12 5:6 17:16  
 27:21 33:15 38:14  
 44:10,11,14 46:6  
 56:19 58:10,13 74:5  
 76:11 90:1 97:5 107:2  
 116:7 120:9 132:4  
 135:15 138:17 182:11  
 184:2,9 187:9 193:21  
 198:19 202:14,15  
 203:8 210:13,20  
 254:6,13 255:4,10  
 278:9,11 285:2,9  
 287:11 302:5,8  
 309:12 320:2,3  
 327:16 330:3 337:13  
 347:2 358:8 362:14  
 362:17 366:6 379:13  
 379:14  
**you've** 36:6 91:9 106:16  
 203:21 254:11,15  
 255:15 256:15,16  
 309:9,10 368:8 371:3  
 375:17 376:11 379:19  
**young** 257:13  
**Yu** 57:5 132:21 196:4  


---

**Z**  


---

**Zamarin** 2:4 9:4,5 29:4  
 29:5,6,12 38:15,17  
 39:3,12 40:3,3 42:18  
 45:12,12 53:8,9 62:20  
 62:21,22 69:18,19,20

88:17,17 101:1,2,5  
 102:16,19,21 103:9  
 103:14 107:10,13,13  
 113:22 114:1,4,10,10  
 115:2,3,21 116:1,18  
 119:12,13 124:9,19  
 127:4,4 128:13,14  
 130:9,10,11 131:18  
 131:20 135:1,1  
 137:12,13 138:3  
 139:7,7 140:18,21,22  
 143:4,5 145:22 146:1  
 156:5,6 165:10,10  
 178:21,22 183:1,1  
 187:16,17,18 209:13  
 211:4,5 218:5,6  
 269:14,15,16 271:5  
 272:19 273:20,21  
 277:11,11 279:17,18  
 281:15,16 284:14,14  
 287:17,18 289:7,9,11  
 291:8,9 298:22 299:1  
 300:6,10 303:21  
 306:21,22 308:4  
 309:16 316:22 317:1  
 319:3,4 320:5 322:6,7  
 334:14,15 338:6,7  
 340:7 343:11,12  
 346:18,19 349:1,1  
 361:9,10 368:12  
 374:17,18  
**Zandaroski** 2:20 251:19  
 251:20  
**zero** 233:13  
**zoom** 6:3,6 30:13

**0**

**0.5** 12:2  
**0085** 239:7

**1**

**1** 12:2 37:16 40:9 43:14  
 76:7 102:20 103:1,4,5  
 116:19 153:2 222:10  
 224:7,7 230:6 285:1  
 286:10 296:18 297:3  
 308:11 314:3 333:5  
 373:14  
**1,000** 21:17 28:2 68:6  
**1,400** 246:12  
**1,600** 261:1  
**1.50** 92:15  
**1:15** 143:22  
**1:20** 144:5  
**10** 52:10,12 59:10 63:12  
 67:6 70:7 74:18 82:12  
 114:15,15 123:17  
 124:13 135:5 189:9

219:3 230:3 292:18  
 293:13 298:2,19  
 300:14 306:5 369:20  
**10-kilogram-per-hour**  
 115:16 126:19  
**10-minute** 92:2,14  
 120:22  
**10-year** 131:6,8 377:20  
**10,000** 57:14 133:1  
**10:05** 91:21  
**10:44** 91:22  
**100** 52:11 252:10,13  
 293:3  
**100,000** 99:19  
**11** 23:18 161:6 238:9  
**11.6** 247:15  
**11:11** 114:18  
**11:32** 114:19  
**113** 222:22 231:1 240:5  
**114** 24:17 220:12  
 223:20  
**12** 135:10  
**12.75** 23:4  
**12:02** 144:4  
**125** 20:3,4  
**13** 256:22  
**14** 84:19 280:9,10  
**14,200** 45:1,8  
**142** 21:7  
**15** 210:19 301:3  
**15-** 219:3  
**15-minute** 91:3,18  
**150** 262:11  
**150,000** 253:3  
**16** 38:4,5 41:7 104:3,4  
 115:14 116:13 141:15  
 141:16  
**16-inch** 33:1 118:11  
**165** 247:12  
**17** 238:9  
**17th** 23:5 28:1  
**18** 52:7 68:5  
**1800** 1:10  
**18th** 11:17  
**191** 238:9,14  
**192** 12:4 20:12 25:11  
 62:13,16 221:13,17  
 229:18 232:4 233:15  
 234:1,5,19 236:15,22  
 248:3,11  
**1929** 19:5  
**193** 220:20 224:4 226:8  
 246:17 250:6 259:20  
 260:3 267:3 312:11  
 373:14  
**193.2624** 231:5  
**1970** 256:21  
**1st** 12:18 28:11 378:11

**2**

**2** 15:22 16:6,18 19:19  
 76:7 81:11 83:3 90:2  
 92:22 102:20 107:9  
 107:21 148:22 222:11  
 237:5,7 249:3 286:10  
 298:8 304:4 308:12  
 308:22 309:4 311:14  
 312:15 314:4 333:6  
**2.2** 246:11  
**2.6** 261:2  
**2:37** 219:7  
**20** 20:1 68:7 74:19  
 79:19 91:18 100:13  
 189:9 257:21 369:4  
**20,000** 27:5,15 44:12  
 45:5,16 52:17 127:12  
 211:22  
**20,000-mile** 27:11  
**200** 54:8 262:11  
**2002** 170:8  
**2013** 376:21  
**2014** 376:21  
**2017** 379:11  
**2019** 57:10 133:3  
**2020** 11:22 21:19  
 220:13  
**2021** 57:10 61:8,10  
 133:3  
**2021-year** 23:15  
**2022** 22:13 57:5 84:4,18  
 85:8 132:21 196:4  
 233:14 239:7  
**2023** 11:17 12:17,18  
 23:16  
**2024** 1:8 5:21 23:5  
 238:20  
**2025** 100:8,14  
**2026** 100:14  
**2030** 100:10  
**205** 21:6  
**21** 27:15 28:2  
**22,000** 65:16 112:16  
 121:5  
**23** 258:22  
**24** 307:15  
**24/7** 247:1 301:13 307:9  
**25** 1:8 186:15 236:12  
 261:16  
**250** 21:14  
**2523** 224:4,6  
**2523(a)** 373:14  
**255** 23:19  
**25th** 186:16 238:20  
**260** 365:20  
**2624** 226:9 227:5 228:1  
**27th** 12:17  
**28** 376:15

**29th** 5:20**3**

**3** 19:19 76:7 83:3 103:3  
 103:10 106:19 107:3  
 107:17,21 222:9  
 237:9 252:12 255:4  
 258:12 286:11 308:13  
 312:14,14  
**3:04** 219:8  
**30** 84:11,19 136:6,6  
 257:20 308:15  
**300** 16:22  
**31905** 339:4  
**31912** 62:8  
**31974** 322:15 325:11  
**325** 21:5  
**37** 52:8  
**378** 20:14  
**38** 84:9  
**3s** 255:7

**4**

**4** 19:19 76:8 286:9  
 290:14 292:18 308:14  
 373:15  
**4,300** 85:8  
**4.4** 253:2  
**40** 210:19 242:1 325:12  
 325:18 369:5  
**427** 22:12  
**43** 84:8  
**466** 85:14  
**49** 24:18 25:5,7 220:14  
 220:17 223:4,16,21  
 231:1 232:4

**5**

**5** 12:8 16:12 103:13  
 107:1 221:12 229:1,2  
 230:6,6,9 235:11  
 252:4 261:19 292:19  
 293:1,7,10,10 297:20  
 306:2,6  
**5:02** 335:8  
**5:48** 380:6  
**50** 131:12 188:10  
 256:18 342:8 344:15  
 344:22 349:6 361:19  
 362:5 364:1 365:15  
 366:1,5,18 367:12  
 369:18 371:22  
**50,000** 50:20  
**500** 21:15 22:2 37:6  
 44:15 45:6 78:15,16  
 78:17 86:22 87:6,12  
**500-mile** 45:15  
**500-plus** 209:21

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This is to certify that the foregoing transcript

In the matter of: Gas Pipeline Advisory Committee

Before: US DOT/PHMSA

Date: 03-25-24

Place: Arlington, VA

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