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, NOVEMBER 27, 2023

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The Advisory Committee met in Jefferson I-III at the Westin Crystal City Reagan National Airport, 1800 Richmond Highway, Arlington, Virginia, at 8:30 a.m., David W. Danner, Chairman, presiding.

GAS PIPELINE ADVISORY COMMITTEE MEMBERS PRESENT HON. DIANE BURMAN, New York State Public Service Commission HON. DAVID W. DANNER, Washington Utilities and Transportation Commission SAMUEL T. ARIARATNAM, Arizona State University PETER E. CHACE, Public Utilities Commission of Ohio ALEX DEWAR, Boston Consulting Group J. ANDREW DRAKE, Enbridge Gas Transmission and Midstream WILLIAM "CHAD" GILBERT, United Association International SARA ROLLET GOSMAN, University of Arkansas School of Law SARA W. LONGAN, U.S. Army Corps of Engineers

ERIN MURPHY, Environmental Defense Fund ARVIND P. RAVIKUMAR, University of Texas at Austin

STEVE SQUIBB, Director, Natural Gas Operations 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. PHMSA STAFF PRESENT or may have been present ALAN MAYBERRY, Associate Administrator for Pipeline Safety; Designated Federal Official TRISTAN BROWN, Deputy Administrator TEWABE ASEBE DAVID BIRCH CLAYTON BODELL ROBERT BURROUGH LAUREN CLEGG IAN CURRY AMAL DERIA SETH DICKSON SEAN FORD, OST BEN FRED KELSEY GAGNON JOHN GALE, Director, Office of Standards and Rulemaking ALEXANDRA IORIO ROBERT JAGGER MARK JOHNSON JENNIFER KELLY, OST JOE KLESIN KATHLEEN "KATY" MAITLAND CHRIS MCLAREN MARY McDANIEL LANE MILLER STEVE NANNEY SAYLER PALABRICA MIA PETRUCCI GABRIELA ROHLCK EMMA M. ROSS CAMERON SATTERTHWAITE, Office of Standards and Rulemaking RODRICK "ROD" SEELEY, National Safety Coordinator, Pipeline Field Operations ANNA SETZER

JOSEPH ST. PETER MASSOUD TAHAMTANI, Deputy Associate Administrator ERMIAS WELDEMICAEL CONOR WALSH

JOE WILLIAMS DAVID YORK

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Adjourn

1	P-R-O-C-E-E-D-I-N-G-S
2	8:35 a.m.
3	MR. MAYBERRY: Well, let's get
4	started. Good morning and thank you for
5	attending this meeting of the Gas Pipeline
6	Advisory Committee.
7	My name is Alan Mayberry, and I'm
8	the Associate Administrator for Pipeline Safety
9	in PHMSA. Pursuant to the Federal Advisory
10	Committee Act, I am the Designated Federal
11	Official for GPAC and will serve as the
12	presiding official for this meeting.
13	Our Chairperson for this meeting
14	will be the Honorable David Danner, who is the
15	Chair of the Washington Utilities and
16	Transportation Commission.
17	Before I introduce special guests,
18	I'd like to discuss meeting protocols, you
19	know, first, starting off with a safety moment.
20	If we do have an emergency or fire alarm and
21	such, the exits you can see marked on either
22	side of my left and my right. If you go out to

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the left out those doors, you see the stairs. You came up probably from the lobby. Straight down those stairs and out the front of the building.

5 On the right, if you take a left 6 outside of any of these doors and go down this 7 corridor, there's an emergency exit that goes 8 to a stairwell that also goes to the outside. 9 So that covers our safety as far as evacuation 10 procedures.

I would like to recognize Tristan
Brown, who's the Deputy Administrator of PHMSA,
who is present today.

14 And then before we get started, I'll 15 go over a few housekeeping items to help ensure 16 the meeting runs smoothly. During this meeting, not all participants will have access 17 18 provide comments. or control to While 19 Committee members full participation have 20 access, public participants will be provided an 21 opportunity to comment and ask questions at 22 allotted times, and those will be well noted by

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the Chair as we go.

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2	If you're not presenting or
3	speaking, please make sure that your well,
4	first of all, make sure your phones are on
5	mute, and then, if you're here at the
б	Committee, make sure your microphone is on
7	mute. As you can tell, these microphones are
8	quite sensitive. And if necessary, take a
9	moment now to check that you're muted. We ask
10	that you hold any comments until we open the
11	floor for discussion.
12	For members of the public, when you
13	are acknowledged, please limit your comments to
14	two minutes or less. We'll be holding tight to
15	that. As you know, we have quite an aggressive
16	week this week with two major rules that we're
17	discussing. If necessary, the Chairperson may
18	ask you to cut your comment short to keep the
19	agenda moving.
20	And, of course, you can submit
21	written comments under the Advisory Committee
22	docket under PHMSA-2023-0061, and any comments

1 should be submitted by January 5th, 2024. 2 Also, this meeting is being recorded 3 or transcribed. So, a transcript of the 4 meeting will be available to the public in the 5 meeting docket about two or three weeks after the meeting. 6 7 Now, in an effort to maintain order 8 and decorum and schedule throughout the 9 meeting, we ask that both Committee members and the public adhere to the basic rules, such as: 10 11 Please don't delay or disrupt the whether 12 meeting, conversing separately by 13 proceedings during or by causing other 14 distractions. 15 Do not interrupt speakers or 16 presenters. 17 Please follow the instructions of 18 the Chairperson and the presiding officer. 19 And please note that anyone who 20 disrupts the meeting will be asked to leave the 21 meeting room. 22 think those are pretty basic Ι

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1 niceties in order to make sure that the meeting 2 runs smoothly. 3 So, this concludes the housekeeping 4 items. Before I turn it over to Chairman 5 Danner, let me just say for a second, this meeting also represents a number of milestones. 6 7 the first One, it's in-person 8 meeting we've had in some time, and it's really 9 awesome to see the members today. 10 And also, we have a number of new 11 members. So, welcome to the new members. 12 And it's just so great to see people 13 in person, you know, both on the Committee, and 14 then, also, the people who attended that are 15 behind me today. 16 mentioned, we're going to be As 17 two rules this covering week: the leak 18 detection and repair rule, which will go first, 19 and then, I'm sure this will be repeated, but, 20 then, later, after that's finished, which after 21 about, say, day three maybe, we'll go to the 22 class location rule. No, day two, actually --

we hope.

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2	And then, it also represents a
3	milestone in that it's key building blocks of
4	mandates that came out of the PIPES 2020 Act
5	through three sections: 113, on leak
6	detection; 114, on O&M procedures that are
7	being codified, and then, 118, on really our
8	expanded scope or our expanded mission that
9	includes cost recovery or the cost-benefit, to
10	include methane abatement measures.
11	And, of course, we're updating on
12	the leak detection rule what's traditionally
13	been just six simple words that were in the
14	Code that really were the requirements, the
15	federal requirements, for leak repair. You
16	will hear a lot more about that later.
17	But, at this point, I would like to
18	turn it over to Chairman Danner.
19	MR. BROWN: I'm going to cut in,
20	Alan. Is that all right?
21	MR. MAYBERRY: Oh, sure. Of course.
22	MR. BROWN: Great. Thank you so

1	much. And I'm going to pay heed to your					
2	request and urging of being brief here.					
3	I did just want to thank a few folks					
4	and I wanted to just provide a few reminders					
5	and a little bit of context for this marathon					
6	meeting.					
7	First of all, I wish everybody had a					
8	happy Thanksgiving, but especially to Team					
9	PHMSA who has been working on preparing for					
10	this marathon meeting for really the last many					
11	days, weeks, months, really years, but					
12	especially in the last few days during a run-up					
13	holiday week. So, thank you to each of you					
14	that have been working so hard to be ready for					
15	this week.					
16	Thanks as well to the new members of					
17	the Gas Pipeline Advisory Committee. We're					
18	exciting, as Alan said, to see everybody in					
19	person and appreciate your service to this					
20	important Committee.					
21	And then, thanks to the folks who					
22	served on the Committee before. In particular,					
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1 we've got Steve Nanney, who has not served on 2 the Committee, but has served us so long. 3 Steve, thank you so much for your service and 4 congratulations on an impending -- we're going 5 to say a little bit of time off. How's that? And thanks Andy for 6 to your many 7 years of service on the Advisory Committee. 8 Ι wanted to just provide the 9 reminder that this Committee is directed by 10 Congress to be utilized as a tool to develop 11 our standards and regulations. And so, the 12 effort we put into it is really to, as close as 13 we can, come to consensus, as we update and 14 strengthen standards. In this case, we have two rules that 15 16 we are working through. They're both directed 17 by Congress, as Alan mentioned. And they are one of over 30 mandates from the PIPES Act of 18 19 2020. 20 This is the methane leak detection 21 and repair rule. It is in many ways a first-22 of-its-kind directive from Congress to minimize

methane emissions.

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2	And America has been leading the
3	charge in developing technologies and deploying
4	technologies to minimize methane emissions
5	across the midstream space.
6	This rule, as drafted, is designed
7	to leverage America's ingenuity, our prowess in
8	efficiency, and to lead us going forward
9	globally in the energy space.
10	And, of course, we have to write
11	rules that will be implemented years from now,
12	as technology has already continued to develop
13	and be deployed in ever-increasingly efficient
14	ways.
15	And so, as you work through the
16	rule, I hope you will consider that context,
17	that we have to write rules for implementation
18	years ahead. And it's usually many, many
19	years, sometimes a decade, before we get to
20	update rules again. And that's why we try so
21	hard and work so hard to be as encompassing and
22	as thoughtful as possible in developing a rule.

1	And that's why your work, the work
2	of the Advisory Committee, but also the many
3	people who I'm sorry I've got back behind me,
4	because I know there's so many people in the
5	room that will continue to work hard to help us
6	write the best rules that we can.
7	And I think just the final reminder
8	and thank you. This is a marathon meeting.
9	This will be a marathon meeting, and I hope
10	you'll just try to remember that we are all
11	attempting to swim in the same direction. If
12	you need a little nudging from one another to
13	be reminded of that, please do.
14	And then the last thank you to
15	Chairman Danner and Chairman Burman for
16	chairing both the efforts of creating these two
17	rules today.
18	With that, I'm going to pay heed,
19	Alan, and kick it back or kick it back to
20	the Honorable Dave Danner.
21	MR. DANNER: Well, thank you very
22	much. I appreciate that. And it's good to

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1	meet you finally, Tristan Brown.			
2	There are a lot of familiar faces			
3	here and a lot of new faces as well. So, let's			
4	just get right into it.			
5	As Alan said, my name is Dave			
6	Danner, and I'm the Chair of the Washington			
7	Utilities and Transportation Commission. And			
8	I'm going to serve as the Chairperson for the			
9	leak detection portion of our marathon this			
10	week.			
11	So, I hereby call this meeting of			
12	the Gas Pipeline Advisory Committee to order.			
13	As Alan said, this meeting is being			
14	recorded, and a transcript will be produced for			
15	the record. The transcript and the			
16	presentations will be available on the meeting			
17	page of the PHMSA website. The docket number			
18	for this meeting is PHMSA-2023-0061.			
19	And before we get started, a few			
20	reminders. For members, presenters, and the			
21	public, please remember to introduce yourself			
22	each time you speak, so your comments are			

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1 properly recorded in the transcripts for the 2 meeting. Additionally, members should set 3 their tent cards on end to alert us that they 4 5 wish to make a comment. I'd like to take 6 And now, an 7 opportunity to conduct the roll call. 8 Cameron, if you would do that for 9 us? 10 MR. SATTERTHWAITE: All right. 11 Cameron Satterthwaite from PHMSA doing the roll call. 12 13 As I say your name, just say here, 14 and we will check you down. Diane Burman? 15 MS. BURMAN: Here. 16 MR. SATTERTHWAITE: Peter Chace? 17 MR. CHACE: Here. 18 MR. SATTERTHWAITE: David Danner? 19 MR. DANNER: Here. 20 MR. SATTERTHWAITE: Sara Longan? 21 MS. LONGAN: Here. 22 MR. SATTERTHWAITE: Terry Turpin?

1		MR.	TURPIN: Here.	
2		MR.	SATTERTHWAITE:	Brian Weisker?
3		MR.	WEISKER: Here.	
4		MR.	SATTERTHWAITE:	Andy Drake?
5		MR.	DRAKE: Here.	
6		MR.	SATTERTHWAITE:	Alex Dewar?
7		MR.	DEWAR: Here.	
8		MR.	SATTERTHWAITE:	Steve Squibb?
9		MR.	SQUIBB: Here.	
10		MR.	SATTERTHWAITE:	Chad Zamarin?
11		MR.	ZAMARIN: Here.	
12		MR.	SATTERTHWAITE:	Chad Gilbert?
13		MR.	GILBERT: Here.	
14		MR.	SATTERTHWAIT	E: Arvind
15	Ravikumar?			
16		MR.	RAVIKUMAR: Here	
17		MR.	SATTERTHWAITE:	Erin Murphy?
18		MS.	MURPHY: Here.	
19		MR.	SATTERTHWAITE:	Sara Gosman?
20		MS.	GOSMAN: Here.	
21		MR.	SATTERTHWAITE:	Sam Ariaratnam?
22		MR.	ARIARATNAM: Her	e.

1	MR. SATTERTHWAITE: All right. And
2	that is it. All are accounted for. And thank
3	you for conducting this sound check.
4	(Laughter.)
5	Over to you.
6	MR. DANNER: All right. Thank you.
7	Now, I'll turn it over to Alan.
8	MR. MAYBERRY: Thank you, Chairman
9	Danner. As you know, as Tristan mentioned, it
10	takes an incredible team that we have here at
11	PHMSA to put a meeting like this on. Many are
12	present here today. Some behind the scenes are
13	not present. But I would like to call out the
14	individuals that are here actually, all of
15	them, and then, those who are here, if you
16	would please stand and be recognized.
17	Mr. Massoud Tahamtani.
18	John Gale.
19	Cameron Satterthwaite.
20	Amal Deria.
21	Janice Morgan was here at the front
22	desk, but she had to leave.

1 Michelle Tillman. 2 Jessica Appel. 3 Jenny Donohue. 4 Bobby Jagger. 5 Sayler Palabrica. 6 Anna Setzer. 7 Brianna Wilson. And Mr. Tewabe Asebe. 8 9 Of haven't covered our course, Ι SMEs who will be covering this today. You will 10 11 be meeting them here in a moment. 12 But Ι really appreciate the team 13 that really organized this meeting and way back 14 several months ago said say what when we talked 15 about having two rules in one meeting. 16 (Laughter.) 17 John does point And that out 18 routinely. 19 again, thank you. But, You're incredible. And I'll turn it back to you, 20 21 Chairman. 22 MR. DANNER: All right. Thank you.

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1 echo your remarks of thanks to And Т your 2 incredible team. 3 So, at this point, we are just going 4 to get right into the discussion. I think we 5 will start -- we're starting with operation and maintenance. 6 7 Oh, okay, well, I'll turn it over to John will tell us what we're doing. 8 John. (Laughter.) 9 10 MR. GALE: Thank you, Chairman. 11 Thank you, Anna. Just a couple of additional 12 administrative matters. 13 I know it may shock you, but we do 14 have coffee for this meeting. So, hopefully, 15 you all found that. 16 There's also a lunch option. If you 17 haven't seen it, it allows you to get lunch 18 picked up and be ready, so we can be a little 19 bit more efficient during the meeting. 20 And it's not true -- Andrew asked me 21 if we're doing Thanksgiving leftovers -- that 22 is not true.

1	(Laughter.)
2	And also, there is a parking
3	discount if you're coming in for the day. I
4	would just check with the front desk or
5	registration and see if you can get that
6	discount for the meeting for parking.
7	Again, my name is John Gale. I'm
8	Director of Standards and Rulemaking in the
9	Office of Pipeline Safety.
10	And good morning to all. Good
11	morning to the public. Good morning to
12	members.
13	This is the first of two rulemakings
14	we're going to present to you. This, of
15	course, is our gas pipeline leak detection and
16	repair rulemaking. The second rulemaking we'll
17	deliver to you later in the week will be on the
18	class location change requirements.
19	Per 49 USC 60115(c)(2) of the
20	pipeline safety statute, the Committee is
21	directed to prepare and submit a report to the
22	Secretary of Transportation on the technical

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feasibility, reasonableness, cost effectiveness, practicability, and recommended
 actions related to the NPRM.

To facilitate the development of the Committee report, we have scheduled this public meeting of the GPAC from November 27th to December 1st, 2023.

8 As the Committee has establishes, 9 the transcript of the public meeting, fully 10 duly recorded and accurately transcribed, 11 together with the presentation slides 12 documenting the Committee's votes during the 13 meeting, will serve as the report of the 14 Committee.

15 And also, in order to facilitate the Committee's discussions and determination of 16 17 the technical feasibility, reasonableness, 18 cost-effectiveness, and practicability of the 19 proposed standard, PHMSA has made available to 20 the Committee of this public meeting our 21 technical, legal, and economic experts, as Alan 22 alluded to earlier.

1	So, we have at the meeting
2	representatives from our Counsel Department.
3	We have Mr. Rob Ross and Amal Deria. And we
4	have additional counsel support in the
5	audience.
6	From our economic team, we have Mark
7	Johnson, our lead economist who is supported,
8	also, by his Director, Ermias Weldemicael.
9	We have SMEs. This is a team that's
10	been a little bit bigger than in the past. So,
11	we have Rod Seeley. We have David York. We
12	have let me see Clayton Bodell, Steve
13	Nanney, Joe Klesin, Sayler Palabrica, Anna
14	Setzer, and even more SMEs in the audience.
15	So, if there's questions you all
16	have, we're here to support you in the
17	development of your report.
18	Okay, let's get to it. It's going
19	to be a long week.
20	(Laughter.)
21	So, on May 18th, 2023, PHMSA
22	published in the Federal Register a Notice of

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1 Proposed Rulemaking to reduce methane emissions 2 and existing gas pipelines. from new This 3 rulemaking responds to congressional mandates 4 in the PIPES Act of 2020 and plays a critical role in the U.S. Methane Emissions Reduction 5 Action Plan by eliminating, conservatively, 0.5 6 7 to 1 million metric tons of methane emissions 8 annually. 9 It also is obliging operators of all 10 Part 192-regulated gas pipelines to develop and 11 implement advanced leak detection programs for 12 detecting, grading, and repair on prescribed schedules of all leaks greater than or equal to 13 14 5 parts per million. 15 Also, it has enhanced leak reporting 16 requirements for distribution, gas gas 17 gas transmission, and underground gathering, 18 natural qas storage facilities, and LNG 19 facilities. 20 This rulemaking would address 21 Section 113, as Alan mentioned earlier, of the 22 PIPES Act of 2020 by requiring operators to

1 adopt an advanced leak detection program able 2 to identify, locate, and categorize all leaks 3 that are hazardous to human safety or the 4 basically, environment and in the _ _ 5 that's 192.763; that's your rulemaking, ALDP including performing 6 program standards 7 reflecting commercially available technology 8 and requiring that operators use this 9 technology.

10 It also includes a schedule for 11 repairing and replacing each leaking pipe, 12 except for a pipe with a leak so small that it 13 poses no potential hazard. And basically, that 14 is your requirement in 192.760.

15 This rulemaking would also address 16 Section 114 of the PIPES Act by requiring 17 operators to update their operation and 18 maintenance procedures to minimize the release 19 of natural gas and the replacement of pipelines 20 known to leak.

21 This rulemaking also complies with 22 the direction in Section 118 of the PIPES Act

of 2020 to consider environmental benefits in PHMSA's regulatory oversight alongside safety benefits.

4 This rulemaking also builds on a lot 5 of the work that we've done, but also this Committee has done on the November 2021 Gas 6 7 Gathering Final Rule by improving alignment of 8 PHMSA's Part 192 regulations governing qas 9 gathering pipelines with the environmental and 10 public safety risks they pose.

11 When we were developing this rule, we looked at a lot of different data sources. 12 13 Of course, my notes just went out on 14 my computer. It's one of those days.

15 the information And some of we 16 looked at this information right was here, 17 which EPA's U.S. Greenhouse was the Gas 18 Emissions and Sinks. And we were able to look 19 at this data to identify relative risk based on 20 different sectors -- gas gathering to qas 21 transmission, to gas distribution.

We were also able to look at this

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information and see where the leaks were coming 1 2 from. Were they vented leaks; were thev 3 fugitive leaks, et cetera? And then, we were able to build the 4 5 rule from that, based on a review of this data. 6 We looked at a lot of other data as well, but 7 utilizing this data gave us in a way a little bit of a leg up to identify what the risks were 8 that were in front of us, and then, how to 9 tailor the rule to those risks. 10 11 Next slide, please. review of this emission 12 А data 13 informed the development of this NPRM, like I 14 was just saying. 15 distribution lines, On what we 16 identified was that virtually all emission from 17 distribution lines are from fugitive emissions 18 -- leaks and incidents, that is. And that can 19 be addressed by these leak detection and repair 20 requirements. 21 When it came to the transmission 22 lines, however, while the PIPES Act requires

leak detection standards, most transmission line emissions are from compressor stations or from venting.

And when it came to gas gathering, gas gathering pipelines and facilities have a much higher emission rate from pipeline leaks compared to gas transmission facilities. And that's why you saw in the proposal where we went and had proposals related to Class 1 gas gathering lines.

11 One of the things when we got into 12 this, I had to learn the difference between 13 vented and fugitive emissions.

14 And so, when you're dealing with 15 vented emission sources, again, like we 16 mentioned earlier, transmission most gas 17 emissions outside of a compressor station are 18 vented emissions. And these include blowdowns 19 associated with maintenance; repairs; 20 replacement and construction; venting from 21 equipment such as pressure release devices; 22 regulators; seals; compressor emergency

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1 shutdown devices, and venting from ruptures, 2 upset conditions, and third-party damage. Next slide, please. 3 other hand, 4 On the most qas 5 distribution emissions are fugitive emissions. Pipeline fugitive emissions also 6 are 7 significant on gathering gas lines compared 8 with gas transmission lines. 9 Fugitive emission sources include: 10 leaks, especially from pipelines known to leak, 11 such as cast iron, bare-steel systems, or 12 plastic systems with known problems; commercial 13 industrial meter sets; compressor stations; 14 residential meter sets, and excavation damage, and other incidents. 15 16 To get into a summary of the 17 proposal -- we have a variety of proposals, 18 variety of different right? We address а 19 requirements in the regulations. 20 We looked at the survey frequency. 21 When it comes to the leak and survey frequency, 22 looked at that for both transmission, we

distribution, and gathering. We looked at the
 patrolling.

Clarified that the leak detection and investigation personnel must be qualified. We wanted to definitely look at training.

We looked at an extension of patrolling requirements and leak survey and repair requirements for gas gathering lines.

9 We also were looking at -- you know, 10 we've very cognizant of the fact that EPA had 11 work going on in this very area, and there was an exception to accommodate EPA's forthcoming 12 13 rules for new source performance standards for 14 crude oil and natural gas facilities and emission guidelines. 15

16 But it also has adoption of the 17 technology-based Advanced Leak Detection 18 Program, or what we're referring to as an ALDP, 19 and а requirement for qas transmission, 20 distribution, and gas gathering pipelines.

21 There's a requirement for all 22 segments to use leak detection equipment with

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very few exceptions.

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2	And there's a classification and
3	prioritization repair requirement for
4	detectable leaks. And when we looked at
5	developing that, we looked directly at the GPTC
6	guide. And we get a more thorough discussion
7	of those proposals, you'll see where we came up
8	with our proposals there.
9	Also, we developed leakage survey
10	requirements for LNG facilities.
11	On the operational releases front,
12	there is a general duty to minimize releases of
13	natural gas and replace pipelines known to
14	leak. This is the Section 114 statutory
15	mandate for gas pipelines, underground gas
16	storage facilities, and LNG facilities.
17	A requirement to minimize emissions
18	from routine blowdowns, and design and
19	configuration of maintenance and relief
20	devices.
21	When we were doing this rulemaking,
22	we were looking at a variety of different

requirements. And one of the things we saw time and time again was releases from relief devices that we thought were not operating in accordance with the manner they should. We thought that was very important to try to address.

Also, when you're doing any rulemaking -- and you've seen it, you know, on gas gathering when we did the -- I hate to say mega-rule -- but the mega-rule.

11 You know, reporting is an important 12 part of the requirements that you have to try 13 to address -- making sure you're getting the 14 right data; making sure you're getting the 15 effectiveness that you're looking for.

16 So, on the reporting front, we have 17 information on emissions and leaks discovered 18 and repaired. Currently, operators only report 19 leaks repaired.

20 There's a large volume release 21 reporting proposal. PHMSA would require 22 operators to report releases of gas, both

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1intentional and unintentional, of 1 million2cubic feet or more.3And we have a proposal to extend the

NPMS reporting to gas gathering pipelines. NPMS currently does not apply to gas gathering or to distribution pipelines.

7 And just for the record, some of the 8 background of the rule, again, PHMSA hosted a 9 public meeting on gas pipeline leak repair and 10 methane emission reduction back on May 5th 11 through the 6th, 2021.

12 The NPRM was published on May 18th, 13 2023, and PHMSA extended the comment period 14 through August 16th, 2023.

15And this was a very popular rule for16us.

(Laughter.)

PHMSA received approximately 40,000 comments for the NPRM from a diverse group of stakeholders. We got it from seven different public safety advocacy groups; 31 environmental advocacy groups; four academic groups. Leak

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detection and technology providers, there were 16 unique submissions there.

3 And on the industry trade group 4 front, we got it from gas pipeline, generally; 5 qas gathering systems; qas transmission liquefied petroleum, 6 systems; and hydrogen 7 operators.

8 On the industry operator front, 9 27 transmission operators; there was qas 26 10 privately-owned distribution companies, and 26 11 municipally-owned or operated gas utilities.

12 And then, on the government front, 13 we heard from the NTSB. We heard from our 14 friends at NAPSR; four other state regulatory 15 agencies; 10 elected officials with two joint 16 letters from several elected officials, and two 17 letters representing several state attorney 18 generals. I think it was approximately 35, if 19 I remember right.

20 And then, of course, there was other 21 businesses or trade associations and a form 22 letter campaign that represented about 38,000

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1 of those comments. 2 Next slide, please. 3 So, at this point in time, what we're going to do is give you an overview of 4 5 the cost-benefit summary or the Preliminary 6 Regulatory Impact Assessment. 7 So, with that being said, I'm going 8 to turn it over to Mark Johnson, who is going 9 to lead through that discussion. 10 Mark? 11 MR. JOHNSON: Test. Okay. 12 Hi. My name is Mark Johnson. I'm 13 an economist with PHMSA's Office of Planning 14 and Analytics. We're the office within PHMSA 15 that develops the Regulatory Impact Analyses 16 that support PHMSA rulemaking efforts. 17 As most of you are probably aware, 18 PHMSA can only issue a new pipeline regulation 19 after making a reasoned determination that the 20 benefits of the intended regulation justify the The RIA considers the costs 21 costs. and 22 benefits of the proposed rule and whether its

benefits justify its costs.

2	Just to give you our bottom line
3	upfront, for the rule as a whole, our primary
4	cost estimates range from about \$740 million to
5	about \$880 million annualized at a 3 percent
б	discount rate, and benefits were estimated at
7	about \$1.1 to \$2.3 billion annualized at a 3
8	percent discount rate.
9	I'll be getting into a little bit
10	more detail on those numbers in a few slides,
11	but, first, I wanted to discuss some of the
12	inputs that allowed us to estimate the economic
13	impacts.
14	This is the leak detection and
15	repair rule. So, obviously, one of the main
16	inputs to the analysis are the amount of
17	pipeline mileage that needs to be surveyed.
18	So, we obtained that from PHMSA Annual Reports
19	that operators submit to us for distribution,
20	transmission, and Type A and B gathering lines.
21	And then, for Type C gathering
22	lines, they are now submitting this data to us
1 as well, but that's a recent development and it was not available to us in time for us to use 2 3 it in the Preliminary RIA that accompanied the So, we used an estimate from the 2021 4 NPRM. 5 gas gathering rule and projected that forward using Type A and B growth rates. And the other 6 7 estimates were projected for using segment-8 specific growth rates.

9 And another important input is leak 10 survey and leak repair unit costs, and those we 11 took from operator rate cases and other 12 filings.

13 And finally, we needed leak 14 incidents and emissions rates. Leak incident 15 rates are the number of leaks that are present 16 on a pipeline per mile, and emission rates are 17 the amount of natural gas that is escaping from 18 those leaks.

And for gathering and transmission operators, they report to us, along with the mileage data, all leaks they find on their systems. So, we could use that data to develop

a leak incidence rate, and then, we derived the emissions rates from EPA's Greenhouse Gas Inventory.

4 Distribution operators do not report 5 all leaks found to us. So, we needed other Thankfully, 6 sources. that segment of the attention 7 industry has received some from 8 researchers.

9 So, we used to peer-reviewed, 10 published studies to estimate those leak 11 incidents and emissions rates for distribution 12 operators. And those studies were Lamb, et 13 al., from 2015, and Weller, et al., from 2020.

14 The Weller study used advanced 15 mobile leak detection technologies and 16 practices and found significantly higher leak 17 incidents and emissions rates than Lamb. So, 18 the emissions estimates from Weller were 19 significantly higher than those for Lamb.

20 Moving forward, when I start getting 21 into some of the numbers, you will see maybe a 22 low scenario and a high scenario. The low

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scenario is based on the lower emissions associated with the Lamb estimates, and those are also consistent with the EPA Greenhouse Gas Inventory estimates. And the high scenario is based on the higher emissions associated with the Weller study.

So, next slide, please.

Once we had an idea of the amount of 8 9 emissions, the number of leaks on various parts 10 of the pipeline system, we could estimate how 11 much our proposed standard would reduce emissions and monetized benefits. And we had 12 13 two streams of monetized benefits. One was 14 climate benefits and the other is value of net 15 lost natural gas.

To monetize climate benefits, we applied per-ton emissions reduction values, based on the social cost of methane, taken from the 2021 Interim Guidance from the Interagency Working Group on the Social Cost of Greenhouse Gases.

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And then, of course, natural gas is

a valuable commodity. And if we find and fix leaks more effectively, less of that value will be lost due to those leaks. So, we monetized the prevention of that loss of natural gas using projected Henry Hub prices, as projected by the Energy Information Administration.

7 As I've already touched on, recent 8 studies have produced a wide range of natural 9 emissions estimates for gathering and qas 10 distribution operators, respectively. The RIA 11 evaluated the rule over a range of emissions estimates, but cost effects would vary 12 as 13 emissions change.

14 already touched the We've on RIA 15 capturing distribution emissions uncertainty by 16 usinq Lamb and Weller as of our range 17 estimates. And the RIA also considered in the 18 sensitivity analysis section a higher emissions 19 scenario for gathering line operators, based on 20 study by Chen, et al., that showed much а 21 higher Permian Basin emissions than the EPA 22 estimates would indicate.

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1	Next slide. Okay.
2	And in addition to the monetized
3	benefits, we describe a couple of different
4	benefit streams that we were not able to fully
5	quantify and monetize.
6	The first I'm going to discuss is
7	safety benefits. We believe that better LDAR
8	practices should detect and eliminate leaks
9	that would otherwise turn into safety-critical
10	incidents. And we see some evidence for that
11	in our incident descriptions in the PHMSA
12	incident database, where incidents are
13	described as being found via leak surveys or
14	patrols.
15	And then, we also see a non-trivial
16	portion of incidents that list leaks as a
17	cause. Unfortunately, we had difficulty
18	quantifying the relationship between leak
19	detection practices and detection of leaks that
20	would eventually become safety-critical.
21	And one of the contributing factors
22	there is it was hard to disentangle the

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1 percentage of leaks that would be identified by 2 leak surveys, which are relatively infrequent, 3 versus being found in between leak surveys by other means, such as odor complaints or other 4 5 third-party reports, or found during patrols or maintenance 6 other operator and repair 7 So, in addition, we had activities, et cetera. 8 difficulty predicting the magnitude and 9 consequences of the safety-critical leaks.

10 And the other stream that we weren't 11 fully able to monetize is health benefits. 12 Methane, especially unprocessed methane, has 13 hazardous air pollutants and volatile organic 14 compounds present in it. And also, release of 15 methane, whether processed or not, contributes 16 to ground-level formation of ozone. Human 17 exposure to these substances leads to negative 18 respiratory health and other health impacts. 19 Unfortunately, we have limited data

on the location of pipeline leaks relative to human populations, and therefore, relatively little information on the exposure magnitude

and duration of human populations to these substances due to these leaks.

3 And in addition, there's a complex 4 relationship levels between exposure and 5 durations and adverse health impacts. So, we were not able to fully quantify those benefits, 6 7 although we have been reviewing some work done this issue of health benefits 8 by EPA on reductions 9 associated with in methane 10 emissions. And we're considering what we could 11 do maybe to develop those further for the final 12 rule phase.

Okay. This slide is a lot of numbers. This presents annualized cost by industry segment and rule provision area at a 3 percent discount rate.

17 And I'll start with gathering. You 18 can see that the gathering line segment, we 19 anticipate patrols as the major cost driver 20 there, followed by leak surveys and leak 21 repairs. And the total economic cost for that 22 segment is estimated at about \$211 million.

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For transmission operators, leakage surveys were the largest cost driver, and we estimated about \$15 million in total cost for them.

5 And for distribution operators, we, again, are using Lamb and Weller to bracket the 6 7 economic impacts. And leakage surveys and leak repairs are the two main cost drivers there. 8 9 And we estimated about \$534 to \$654 million in 10 total cost impacts there, for a total for the 11 rule of about \$540 to \$880 million. 12 Next slide.

13 tables, the top These two table 14 presents the estimated benefits of the rule, 15 the monetized estimated benefits -- they do not 16 include the non-monetized benefits 17 annualized at a 3 percent discount rate again.

As you can see, the climate benefits are by far the larger benefit stream. They're about an order of magnitude higher than the natural gas loss benefits.

And for gathering lines, we

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1 estimated benefits of about \$553 million. 2 Transmission, we estimated benefits of about. 3 \$12.1 million, and for distribution, our estimate of benefits was about \$515 million to 4 5 \$1.8 billion, for total benefits of \$1.1 to 6 \$2.3 billion. 7 And in the lower table, we present 8 benefits, costs, and net benefits at 3 and 7 9 percent discount rates. I'm going to focus on 10 the 3 percent rates, just to be consistent with 11 everything else I've presented. benefits for gathering 12 Net line 13 were estimated to operators be about \$343 14 million. For transmission, we had a net cost 15 of about \$3 million. For distribution, we were 16 just over the breakeven point at about а 17 in net benefits, using million the Lamb 18 estimates, to significant positive emissions 19 benefits, using the Weller estimates of net 20 \$1.1 billion. So, the rule as a whole had net 21 benefits of about \$341 million to \$1.4 billion. 22 So, next slide, please.

1 And I don't know if most of you are 2 aware of this, but OMB just issued new guidance 3 to agencies on how to conduct regulatory impact 4 analysis. As part of that new guidance, they 5 recommended that agencies assess rules at a 2 percent discount rate. So, this slide presents 6 7 benefits and net benefits at а 2 percent 8 discount rate. 9 And I'm not going to go through 10 these in а lot of detail, but the general 11 takeaway from this is that the lower discount rate causes net benefits, and net benefits to 12 13 increase some. 14 with that, that concludes So, my 15 summary of the RIA. And I'll hand it back over to John 16 17 Gale. 18 MR. GALE: Thank you, Mark. 19 Thank you, Anna. 20 Members, so what we recommend we do from here 21 is we've broken up the Committee 22 discussion in this rulemaking into about nine

1 different parts. The 10th one there is the 2 discussion of the Committee report. we have an agenda where 3 So, we 4 first, operations, discuss, maintenance, and 5 venting. We would, then, move from there and 6 7 move to leak surveys and patrols. 8 From there, we would discuss the 9 program, leak grading and repair, ALDP gas 10 gathering, reporting, then followed up with LNG 11 and hydrogen, and have a discussion on 12 compliance deadlines. 13 And then, at the very end, nine is 14 kind of like a miscellaneous category, where we 15 operator would discuss things like 16 qualification, a variety of our definitional 17 proposals, like hazardous leak, business 18 district, et cetera. 19 still, within But, even these 20 discussion points -- and, of course, it's going 21 to be your prerogative and the Chairman's 22 prerogative -- you know, there might be the

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need, because some of these areas are a little beefy, there might be a need for multiple votes. Like grading and repair is pretty long. But, you know, we'll see how we go when we get into those discussions.

we're going to have different 6 So, 7 discussion in these SMEs lead the different 8 parts. And the very first one we're going to 9 discuss is going to be operations, maintenance, 10 and venting.

11 MR. DANNER: So, John, just before 12 we get into each of these items, I just wanted 13 to make sure if the Committee members had any 14 for John or Mark Johnson at questions this 15 point. This is an opportunity to ask them. 16 Okay. Yes, Peter? 17 MR. CHACE: Yes. Thank you. 18 Pete Chace, representing NAPSR. 19 Mark, a quick question for you. In 20 you have estimates of methane the NPRM, 21 sources, methane emissions from various 22 And I just wanted to know -- you have sources.

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also discussed a lot of different studies that
 have come in with Lamb, and I can't recall the
 other one.

Do you have a reason to believe that those estimates of emission sources from various categories are incorrect or should be called into question?

8 MR. JOHNSON: Well, what we relied 9 on primarily was the EPA Greenhouse Gas 10 Inventory. Those are the official government 11 estimates.

In addition, we relied on the Weller 12 13 study, which is peer-reviewed and published. Ι 14 know there's been some criticism of that study 15 in the comments received, but we we were 16 evaluating those to consider those comments. 17 We do think it is a fairly high-quality study 18 large number of leak and does have а 19 It's got a much larger sample observances. 20 size than the Lamb study.

21 So, yes, but we haven't made a final 22 decision on how we would address those

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1 comments, but we're aware of them. MR. CHACE: 2 Thank you. 3 MR. DANNER: All right. No other 4 questions. 5 So, John, take it away. MR. GALE: Thank you, Chairman. 6 7 John Gale again, PHMSA. 8 So, again, just following up, we're 9 going start off here with operations, to 10 maintenance, and venting. Hopefully, we can 11 get through that this morning, and then, this 12 afternoon start maybe discussing leak surveys 13 and patrols. 14 So, Steve Nanney will lead us in our 15 discussion of operations, maintenance, and 16 venting. 17 Take it away, Steve. 18 MR. NANNEY: Good morning. 19 My name is Steve Nanney with PHMSA, 20 and I'11 be going through, as John said 21 earlier, the operations, maintenance, and 22 venting section of the rulemaking.

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1 First, the first slide we've got up 2 is on procedure manuals in Part 192.12 and Part 192.605. 3 4 The requirements for current 5 manuals which in Section procedure are 605 6 transmission requires operators of qas 7 pipelines, distribution pipelines, and offshore 8 gas gathering pipelines, and Type A gas, to 9 have them follow procedure manuals. 10 Also, Section 192(12)(c) addresses 11 similar requirements for underground natural 12 gas storage facilities. 13 And also, in Section 192.605, it 14 directly address the mandate does not in 15 Section 114 of the PIPES Act of 2020 that John 16 talked about earlier to eliminate leaks and 17 minimize the release of natural gas. 18 Next slide. 19 Notice of Proposed Rulemaking The 20 proposal for the procedure manuals in Section Section 192.605, again, 21 192.12 and it's to 22 update these sections to require operators of

gas pipelines and underground natural gas storage facilities to address eliminating leaks, minimizing releases of gas, and replacing or remediating pipelines known to leak.

Also, PHMSA has proposed to require
procedure manuals for Type B and C regulated
gathering lines, and also, for LNG facilities.
Next slide.

10 As far as what the intent of this 11 portion of the section is, it is transmission 12 blowdown mitigation. It's in Section 192.770.

13 The current requirements for 14 blowdown mitigation, again, it really doesn't 15 generally require operators to mitigate planned 16 and intentional emissions.

17 The proposal that we're proposing in 18 rule transmission and the is that qas LNG19 mitigate operational non-emergency operators 20 blowdowns. An example to look at would be 21 EPA's Methane Challenge Program and industry 22 commitments.

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1	A non-emergency blowdown is defined
2	as one that does not involve the activation of
3	the operator's emergency plans under Section
4	192.615.
5	Next slide.
6	A major part of this is relief
7	device design, configuration, and maintenance
8	that are in Section 192.199 and Section
9	192.773.
10	And again, the proposal in the rule
11	is maintenance and configuration. It is that
12	the operator must have written procedures for
13	assessing pressure relief valves that activate
14	unintentionally or fail to operate as designed.
15	And again, just for everybody, I
16	think everybody knows a relief valve is
17	normally used in compressor stations. It may
18	not be exactly in the compressor station. It
19	may be on the main line that the compressor
20	station feeds into and to laterals that feed
21	into the pipeline. When they have different
22	MAOPs is normally where you will see relief

valves.

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2	Going back to the slide, when the
3	relief valve fails to operate at or above its
4	set activation pressure, or otherwise fails to
5	provide overpressure protection, the
б	malfunctioning device or sensing equipment must
7	be replaced immediate.
8	And a relief device that allows gas
9	to release at an operating pressure below the
10	set activation pressure range, the operator
11	must take immediate action to prevent further
12	releases or repair or replace the device within
13	30 days.
14	Next slide.
15	Again, the current requirement for
16	design, configuration, and maintenance of
17	pressure-limiting, relief, and regulating
18	devices. In Section 192.199, it defines the
19	design requirements for pressure-limiting,
20	relief, and regulating devices.
21	Section 192.739 addresses the
22	requirements for the inspection and testing of

these devices.

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2	The Notice of Proposed Rulemaking
3	proposal and the design of Section 192.199 is
4	that the set and reset pressures, device size,
5	and sensing line location must be designed and
6	configured to minimize unnecessary releases and
7	be suitable for the operating environment that
8	it's placed in. Also, relief devices must
9	include isolation device valves, I mean, to
10	facilitate testing and maintenance.
11	Next slide, please.
12	As far as Section 192.199(i) for
13	pressure relief valves (audio interference).
14	Is it, I guess, working?
15	As far as comments that we received:
16	NAPSR expressed general support for
17	this provision.
18	Industry trade representatives
19	encouraged PHMSA to clarify the requirements.
20	It keeps going in and out, Cameron.
21	Okay, closer seems to help.
22	Multiple operators requested

1 clarification on under what circumstances PHMSA would consider a 2 change for location of а 3 limiting device. (Audio interference.) 4 5 Hello. I don't know; it seems to be working. 6 7 The next bullet here is an operator 8 asked PHMSA to remove Section 192.199(i)(2), as 9 it pertains to existing requirements. 10 Next slide, please. 11 PHMSA notes on this Section .199 12 that it is a non-retroactive subpart which 13 would only apply to facilities installed and 14 modified after the effective date of the rule. 15 The revised design requirements are 16 intended to apply only to the components that 17 relocated or changed, are and PHMSA will 18 clarify that the (audio interference) 19 requirements and will address any duplication 20 in the final rule. 21 Next slide. 22 Other comments received:

1 An operator requested an upfront clarification on (audio interference) isolation 2 3 valves needing to be installed. 4 couple of industry trades wrote А 5 installing unnecessary that valves will installation and maintenance cost 6 increase 7 without commensurate benefit. They urged PHMSA 8 to reconsider the requirement for isolation 9 valves. 10 An operator stated that the proposed 11 Section 192.199(i)(3) would be too restrictive 12 and urged PHMSA to consider alternatives for 13 isolation pressure relief devices for testing 14 and maintenance. 15 Next slide. 16 Multiple trade associations wrote 17 that the proposal does not indicate (audio 18 interference) valve must be installed (audio 19 interference). 20 MR. DANNER: Sorry about these 21 technical issues, Members and the public. 22 We're trying to come up with a solution right

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1 Just bear with us one second, please. now. 2 (Pause.) 3 MR. NANNEY: Hello. It's working 4 It's going off and on, is what it's been now. 5 doing. 6 Go ahead? Okay. 7 The last bullet up there is, again, PHMSA will clarify and ensure that 8 the 9 unnecessary valves are not required in the final rule. 10 11 Next slide, please. Some other 12 comments that were received on procedure 13 manuals: 14 NAPSR expressed support for the 15 requirement. 16 We had an operator comment that the 17 requirement to have procedures for eliminating 18 leaks was beyond the mandate in the PIPES Act. 19 Also, GPTC, an operator commented 20 that the amendments in Section 192.605 would 21 duplicate existing requirements addressing 22 risk-based pipe replacement in Section

192.613(b), 192.703(b), and in DIMP 1 leak 2 management requirements. comment from 3 Also, we qot a the 4 Attorney General of New York that said that 5 Section 192.605 would support PHMSA cooperation 6 with undertaking inspection states and 7 enforcement activity in connection with the 8 PIPES Act. 9 Also, industry trade suggested that 10 the revised Section 192.605 should require 11 operators to reduce, rather than minimize, 12 emissions. 13 PHMSA notes that And then, the 14 amendment to Section 192.605 codifies the 15 requirement from Section 114 of the PIPES Act of 2020 that the term minimize is used in the 16 17 statute. slide, please. 18 Next As far as 19 blowdown mitigation, some of the comments we 20 the notice state qot to are and U.S. 21 representatives, NAPSR, and an environmental 22 representative expressed support for

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requirements aimed at reducing intentional releases.

the Attorney General of 3 Also, New 4 York suggested that operators, first, 5 prioritize methods to prevent releases, and then, minimize emissions that are unavoidable. 6 7 And then, lastly, multiple industry 8 trades stated that the proposed requirements 9 prescriptive would hurt were overly and 10 operator flexibility. 11 Next slide. 12 Just one second here. Normally, 13 when I give these slides, my biggest issue is 14 reading the slides when they're up there. 15 Today, I think my voice coming in and out has 16 been my biggest challenge in going through 17 this. 18 So, anyway, blowdown emissions is 19 the next comment that we got comments from. 20 The industry trade suggested that the blowdown 21 mitigation requirement should direct operators 22 to reduce, rather than minimize, emissions.

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the An operator stated that intentional release standard was of qas too only broad and that it should include intentional releases that relate to planned repairs.

And then, last on this slide is from 6 7 multiple operators and industry trades. They 8 expressed support for limiting the 9 applicability to planned releases that exceeded 10 defined volume of gas and suggested the а 11 requirement should be for blowdowns that are expected to exceed 1 million cubic feet of gas. 12 13 Next slide.

14 Multiple operators and industry 15 trades suggested expanding the section for 16 emergencies to include safety risks and 17 commercial impacts.

18 Multiple operators suggested that 19 PHMSA focus on a total emission reduction 20 across the operator's footprint, instead of a 21 specific volume or pressure reduction. In 22 other words, how much gas they save in a year's

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1 timeframe. Look at it on some annual basis 2 versus individual impact. 3 An operator also said the prevent or 4 minimize standard is ambiquous and suggested 5 PHMSA define a threshold of 50 percent, which is consistent with EPA's Methane Challenge. 6 7 Next slide. PHMSA requests that the Committee 8 9 give us feedback on the scope of the blowdown 10 reduction requirements, including consideration 11 of a minimum release volume criteria and/or a 12 systemwide emissions reduction target, and the 13 applicability to planned or unplanned releases. 14 And we note that the proposed Large 15 Volume Gas Release Report would be required for any gas released over 1 million cubic feet. 16 17 Next slide, please. 18 Some additional comments that we got 19 to the rulemaking: 20 An operator said that it was neither 21 realistic nor practical to expect operators to 22 have mobile compression standby. on

1 Additionally, mobile compressor supplies may not be ready for increased demand. 2 3 Multiple operators and industry trades said that PHMSA should not restrict the 4 5 use of flaring. individual 6 Also, have an we 7 commenter that suggested venting and flaring be 8 prohibited. 9 the Pipeline Safety Also, Trust 10 suggested that PHMSA clearly articulate flaring 11 be reserved for instances when other mitigation options are impractical or unsafe. 12 13 Next slide. 14 Some of the environmental advocacy 15 groups noted that flaring is preferable to 16 venting gas and it should be used as a last 17 resort after all other options have been 18 exhausted. The commenter suggested that PHMSA 19 permit an operator to flare only if all non-20 flaring methods have been exhausted. 21 Industry trade shared that a minimum 22 pressure requirement or pressure reduction

1 should not be included.

2 And then, PHMSA notes that flaring 3 is one of the methods allowed for blowdown 4 emissions reduction in EPA's voluntary 5 programs. 6 Next slide. 7 Also, comments that we got on Section 192.770(c): 8 9 it's Pipeline Safety Again, Trust 10 expressed support for the requirements, but 11 suggested that PHMSA set standards for 12 operators to follow for each instance of vented 13 emissions and ensure that operators mitigate 50 14 of their emissions using a given percent 15 technology. 16 Also, industry trades said that 17 there was no need for operators to document the 18 methodologies associated with intentional 19 releases and that it should clarify 20 requirements that can be satisfied through the 21 development and implementation of written 22 procedures that apply to their pipelines.

Next slide. 1 2 Aqain, this is still on Section This is on relief valve maintenance. 3 192.773. 4 Industry trades and some operators 5 recommended that PHMSA incorporate the proposed 6 maintenance requirements into existing Section 7 192.739, since they broaden the scope of inspection and testing to include requirements 8 9 for maintenance and recordkeeping. 10 And the industry trades also 11 commented that continuous action is instead of a defined 12 unnecessary, and that 13 timeframe, PHMSA should allow operators to 14 complete pressure relief device remediation as 15 soon as practical. 16 Next slide, please. Some other 17 comments that we got on this section is an 18 individual operator and an commenter 19 recommended that PHMSA add our operating 20 knowledge and historical documentation as an 21 alternative to а documented engineering 22 analysis.

Also, NAPSR recommended that PHMSA
require records associated with relief device
malfunction to be maintained for a pipeline's
lifetime.
And a note from PHMSA is that we
will clarify that continuous action is no
longer necessary following the cessation of a
release and the implementation of alternative
overpressure protection measures.
Next slide, please.
Some additional comments. And this
is on the operations and maintenance and
venting, the PRIA.
Again, one comment we got is an
operator said that PHMSA's cost assessment of
the blowdown mitigation measures in Section
192.770 was not accurate. And I think Mark
spoke on that earlier. PHMSA notes that PHMSA
appreciates the comment and will update the RIA
appropriate.
Next slide, please.
And this concludes PHMSA's response

1 to comments on operations and maintenance. Next slide. 2 3 As far as operations, maintenance, 4 venting, specific topics raised and by 5 commenters that PHMSA is requesting the Committee recommendations on include: 6 7 Carryover and blowdown mitigation is 8 required. is minimum release volume 9 2 No. 10 criteria or a systemwide emissions reduction 11 target. 12 And three, applicability to 13 intentional releases associated with planned or 14 unplanned work. 15 Next slide, please. And then I'll 16 turn it over to John for public comments -- or 17 to Dave. 18 MR. DANNER: Actually this is Dave 19 And thank you, Steve -- and sorry Danner. about the IT problems, but I think we got the 20 21 gist of it. Thank you very much. 22 So this is an opportunity for Neal R. Gross and Co., Inc.

1 Committee members to ask questions of -- oh, 2 you don't want to have questions. Just 3 clarifying questions? All right. 4 All right. Comments? 5 MR. MAYBERRY: Thank you, Sayler. This reminds me of why I don't like wireless 6 7 speakers in my house. 8 So, yes, we're going to take public 9 now. We're going to do it -- if comments 10 people want to make comments on the operations, 11 maintenance, and venting section. The commenters are going to be down in the front, 12 13 if we could. If the public could line up on 14 the right side and then make their comments 15 here at the speaker that -- at the very front 16 of the room by the screen where Cameron's at. 17 Thank you, Ben, for leading the 18 charge. 19 MR. Good KOCHMAN: morning, 20 My name's Ben Kochman. I'm the everyone. 21 Director of Pipeline Safety Policy for the 22 Interstate Natural Gas Association, or INGAA.

Thank you all for the meeting this morning.

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2 I just wanted to state overall that really appreciates the opportunity to 3 INGAA 4 comment on this very important proposed rule. 5 On its whole INGAA is very supportive of the concept of the rule, but would appreciate there 6 7 several tweaks reflected in being as our 8 comments. That said, I wanted to highlight a 9 couple quick things then have a question at the 10 end.

11 So regarding the cost benefit 12 analysis and the regulatory impact analysis 13 INGAA did detailed dive on а the written 14 found there to be substantial analysis and 15 issues with it. For instance, for one thing 16 using the PHMSA data we had anticipated the 17 cost effectiveness of being about \$23,763 using 18 PHMSA data. Using our own analysis we have --19 excuse me, \$23 million. And then our analysis 20 with our own data for what things are actually 21 practically used we estimated a low of 363 22 million and a high of 822 million per year,

total cost to the industry.

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2	So I wanted to highlight a few
3	things. There were some faulty assumptions
4	that PHMSA used, especially that leak rates
5	will increase due to the over-2,500 miles of
6	additional mileage added per year. As many of
7	you are aware, building new pipelines is not
8	something that's every easily come by or
9	that's easy to come by these days. So that's a
10	pretty faulty analysis when you're doing the
11	overall cost and benefit analysis.
12	Also I recognize that OMD sets your
13	analysis now. And the new guidance that just
14	came down about two weeks ago changed it from 3
15	percent that you had done to 2 percent.
16	Recognize that you're going to do an updated
17	regulatory impact analysis. We appreciate
18	that. But I would encourage you all to please
19	review the INGAA cost benefit analysis comments
20	as they will be more accurate numbers reflected
21	in your data.
22	Last but not least, just had a
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question about the status of the Section 114 report that you all -- that PHMSA was supposed to be producing, if you all had an updated timetable for when that would be released. And also if there will still be an opportunity for public comment. Thank you very much.

7 MR. TAYLOR: All right. I'm Eric 8 Taylor. I work for BHE GT&S here to speak on 9 behalf of 199, the proposed INGAA. Just 10 requirement for engineering analysis, currently 11 there's requirements as we saw here today with 12 199 and 201 that talk about accurately sizing 13 and have adequate capacity to ensure that the 14 relief valve operates adequately and can vent 15 appropriately. And so that -- the main purpose 16 of the relief valve is to vent natural gas to 17 prevent exceedance of the MEOP. So we don't 18 currently as operators set the pipe -- or set 19 the relief valve up to vent unnecessarily. So 20 it's already currently -- requirements are 21 already there to ensure it's properly sized and 22 vents appropriately to protect the integrity of

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1 the pipeline. So thank you. 2 They're all taller than MS. SAMES: 3 me. Christina Sames, American Gas Association, and thank you for allowing the public to speak. 4 comments really pertaining 5 Two to the preamble. And I apologize it's now because 6 7 there wasn't an opportunity for the public to 8 speak on the preamble when it was discussed. 9 First, in the _ _ PHMSA has our 10 opinion misinterpreted the PIPES Act, but Ι 11 actually would prefer to read what Congress 12 sent to PHMSA, those that actually created the 13 PIPES Act. And what they stated in their 14 is the Notice of letter Proposed Rulemaking 15 exceeds PHMSA's regulatory authority granted in 16 the PIPES Act of 2020. Congress clearly stated 17 that the rule should address pipeline -- gas 18 pipeline safety and protecting the environment 19 by reducing leaks from pipelines. There was 20 mention by Congress of PHMSA's need to no 21 address environmental iustice or climate 22 concerns. We are deeply concerned that PHMSA's

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13 hazardous to human safety. 14 PHMSA has taken the phrase hazardous 15 to human safety or the environment to its most 16 extreme interpretation rather than the 17 appropriate targeting of repair of leaks to the 18 more specific terms that have the potential to 19 become explosive or otherwise hazardous. They 20 go on to also talk about the proposed rule's 21 cost benefit and how it's inadequate and а 22 variety of other things.

using the NPRM to push climate initiatives into federal regulations at the expense of public safety.

PHMSA's proposed rulemaking exceeds 4 5 statutory authority and its requirements of all leaks to be repaired. Section 113 directs PHMSA 6 7 to promulgate a rule that establishes minimum 8 requirements for leak detection and repair 9 programs capable of identifying, locating, and categorizing all leaks that are hazardous to 10 11 human safety or the environment or have the otherwise 12 potential to become explosive or

1 This was signed by the chairman of 2 Committee of Transportation the and 3 Infrastructure, the chairman of the 4 Subcommittee of Railroads, Pipelines, and 5 Hazardous Materials, and Infrastructure, ranking member of the Senate Committee of 6 7 Science, and Commerce, Transportation, and 8 ranking member of the Subcommittee on Surface 9 Transportation, Maritime, Freight, and Ports, 10 basically the groups that created the 11 rulemaking.

Second, 12 on the statements 13 inclusions. There are statements inclusions in 14 are a bit misleading or the preamble that 15 You all mentioned the Weller inadequate. 16 study. Even EPA has moved away from the Weller 17 They are now focused on the Lamb study. study. 18 Therefore, PHMSA should also move towards --19 away from Weller and towards Lamb.

20 And then PHMSA also references IEA's 21 global methane tracking which generates 22 estimates of methane emissions from human

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activity, but that human activity also includes coal and oil, so those estimates are also inaccurate.

say because A]] of this to 4 the 5 preamble is the basis for the technical changes and the cost benefit, if those are wrong, then 6 7 so are the technical changes that are being proposed and also the cost benefit. And thank 8 9 you for considering the comments.

10 MR. LAMBERT: Good morning. Jason 11 Lambert from Williams Companies, an INGAA 12 member company. Just want to make a comment on 13 the proposed rulemaking there in 199 and then 14 773.

15 So we recommend in 199 the terms of 16 documented engineering analysis beyond what is 17 necessary and pressure choking. We filed a 18 comment noting that those are subjective terms. 19 We recommend that those be outlined and provide 20 more clarity in the rule as to what those are. We see that difficult in the future as far as 21 22 enforcement goes with those terms.

1 Also with respect to the valves, the 2 need to install upstream and downstream in Part I believe I saw the comment there in one 3 199. 4 of the slides, but just want to reiterate that 5 the use of the existing valves -- that's an in 6 important concept terms of measuring the 7 effectiveness of the relief devices to use 8 existing valves. Don't necessarily need to 9 install downstream isolation upstream and 10 valves. 11 And also the section of 773 -- we recommend that that -- the items proposed in 12 13 Section 739, the pressure 773 be moved to 14 device and maintenance and adjustment relief 15 and configuration section. We believe that 16 accurately for that proposed more space

17 language in 773.

And then finally, the 30-day need to install, if -- timeline to install. Industry typically doesn't have these relief devices on a shelf that we can easily go grab. So the replacement as soon as practicable I think is a

1 -- we think is a more relevant term or use of 2 language there in -- just because these valves 3 often take time to acquire and install. So 4 thank you very much. 5 MR. CAREY: Good morning. I'm Pat Carey with Kinder 6 Morqan here on behalf of 7 INGAA. Kinder Morgan has been using some of 8 9 these mitigation techniques for blowdowns for several years and offered some of the comments 10 11 that Steve summarized I think somewhere around 12 slide 40 regarding the need for some relief on 13 how the current language is written. 14 And to provide a little color behind 15 some of our comments on this, if you look at 16 the emergency events that would trigger the 17 relief of use of those particular methods was a 18 little bit shy of what actually happens in the 19 real world. 20 look at a scenario where we You have some 21 third-party damage, a piece of heavy equipment 22 tracked across a particular line, put a gouge

1 in the line. And our current processes would 2 immediately take that pressure off that line 3 just while we do the assessment, grinding out, 4 evaluating the gouges to see whether there is a 5 more permanent repair needed. That is not. something that would have been covered in the 6 7 exclusions that are allowed under 615(a)(3), I 8 think it was. So that one scenario provides a little bit of color to that. 9

is 10 Another one the commercial 11 impacts that are associated with some of this 12 work. We had a valve with a packing leak that 13 we assessed. We were trying to make the 14 repairs on the packing. Deemed that to be an 15 unacceptable method. Had reduced the pressure 16 in order to do that, but -- this was also a leak and wasn't a hazardous situation 17 minor 18 from a safety perspective, but it was providing 19 -- this particular line was providing critical 20 service to power generation in the Houston area 21 over the summer when we had the high heat 22 issues.

Based on what guidance that we're
getting from ERCOT and the Railroad Commission
in Texas, taking that particular line out of
service in one of the severe heat days was a
critical item. And we deferred that repair
until we could get the line so that service
wasn't as critical of an item. That particular
issue is more of the grading issue that we'll
probably talk about more in detail coming up.
So just again to provide a little
bit more color to that, the other item that
Steve mentioned was the aggregation of the
leaks that we have over the course of a year.
The current definition of when these mitigation
techniques are required is I wouldn't say
vague, but it's more general in that it covers
everything. There needs to be some further
definition behind that because you've got small
issues of maintenance in a compressor station,
a filter vessel where we've got filter element
change-outs.
The cost benefit doesn't really

1 cover any engineering or piping modifications 2 would be required in order to that capture 3 those venting operations, whether it be going 4 to a flare system or recovered in some other 5 if that's fashion, possible. So the cost 6 benefit needed to be improved or provide some 7 relief because when look at these we small 8 blowdown, the volume isn't that significant, 9 but the cost to capture them would be. And if 10 we look at the overall emissions from an 11 aggregation perspective we feel more 12 comfortable that that's achievable. Thank you. 13 MS. BYRNES: Corinne Byrnes, 14 National Grid. This is with respect to the 15 relief device changes that are proposed. So 16 first, National Grid already designs, installs, 17 maintains pressure relief devices and in а 18 manner to ensure gas is delivered safely and 19 reliably and each activation is reviewed 20 closely with the intent to determine if any 21 changes are warranted.

Relief valve releases are a

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and fundamental occurrence in necessarv ensuring pipeline safety. It is always done with the interest of preserving public safety and protecting against the risk of overpressurization. Ιt is а necessary safetv measure in the delivery of natural gas.

7 respectfully ask that So Ι PHMSA 8 consider the following points. Some of these 9 points were already raised, so I'll just state 10 agreement. Somebody commented on the my 11 requirement to repair as soon as practicable, 12 but within 30 days when an activation occurs. 13 Yes, it's not always possible to perform this 14 short time frame considering in such a we 15 design, ordering and receiving parts, and 16 complete installation.

17 The language around immediate and 18 continuous action on site to stop the release, 19 with the comment on aqree that. It's not 20 always possible to stop the release at that 21 time and to continue to provide gas service. 22 Another point I wanted to make, the

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1 monitor control setting is set at a pressure to ensure that the station outlet does not exceed 2 3 MEOP plus allowable buildup. In some cases 4 such as what we do operators use a combination 5 of monitor control and full relief to ensure that additional 6 there layers of are 7 overpressure protection. The configuration may 8 vary by operator and by individual 9 installation. It is important to preserve the 10 ability to set the monitor appropriate at 11 pressure based on the operator's experiences 12 and knowledge of the system and what is 13 protected downstream.

14 Operators always know may not 15 immediately when а relief valve has been 16 activated at its set activation pressure. 17 Depending on the skater monitoring in place. So operators can only be held accountable for 18 19 taking required actions when they have this 20 knowledge. Aqain, the consideration of 21 confirmed discovery is important.

Some of our cost impact. To address

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these concerns, National Grid will enhance our existing inspection policy for relief valves to limit the unlikely event of exceeding the activation pressure tolerances. This cost at 417 relief value locations would cost about 2.085 million.

7 regarding For the concern skater 8 monitoring, we are proposing to install 9 differential pressure transmitters to provide 10 system operations the ability gas to 11 immediately detect the operation of a relief indicate that 12 valve. This will the relief 13 valve is activating. Again, 417 relief valve 14 locations with a cost 50,000 of per valve, totaling 20.85 million. 15

National Grid proposes 16 that PHMSA 17 change the language of the proposed regulations 18 reconfigured relief valves when new or and 19 limiting devices are designed to operate -- to 20 activate when needed. And for 192.739 to allow 21 operators to develop written procedures to 22 evaluate the functioning of proper pressure

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limiting or relief devices and prepare those that are found malfunctioning.

3 Lastly, from a practical perspective 4 it's difficult for operators enforce to 5 pressure controls that prevent relief valves from venting. Again, so long as it's within 6 7 the MEOP plus allowable buildup and at the same 8 time ensure that we operate our distribution 9 system at the appropriate operation pressure 10 required for system demand.

11 Also for operators' periodic 12 inspection requirements PHMSA must take into 13 consideration minimum pressure differential 14 requirements to active the relief valve. Thank 15 you.

MR. DANNER: All right. Thank you. I just want to remind commenters that we do have limited time here, so if you are -- have an urge to repeat things that have been said by others, please make your comments as brief as possible.

Otherwise, go ahead, sir.

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Thanks. I'll be quick. MR. MURK: So good morning, everyone. Always appreciate the opportunity to provide public comment and 4 for appreciate PHMSA's holding these advisory Committee meetings. I think they're important for to work through the very us rulemaking.

8 So I'm Dave Murk. I'm the Senior 9 Pipeline Director at the American Petroleum 10 Institute and my comment concerns the proposed 11 changes to the requirements for the design and 12 configuration of pressure relief and limiting 13 devices in accordance with 192 49 CFR 14 192.199.

15 My first comment is that PHMSA 16 should clarify what is meant by the phrase 17 documented engineering analysis, which is not 18 defined in the proposed rule. If the intent is 19 to maintain records to require operators or 20 documentation for compliance purposes, PHMSA 21 should include clear language to that effect in 22 the final rule. PHMSA should not use a phrase

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such as documented engineering analysis that is otherwise undefined.

second comment is that 3 Mv PHMSA 4 should clarify the provisions relating to 5 upstream and downstream isolation valves. The does not indicate whether 6 proposed language downstream PSVs must be installed at the inlet 7 or after the discharge of the relief device. A 8 requirement to install an isolation valve on a 9 10 discharge side of а relief valve would 11 introduce safety risks associated with 12 inadvertent closures that could block the PSV. 13 That kind of a requirement is also unnecessary 14 as relief devices are regularly isolated by a 15 route valve located beneath the PSV.

16 Α requirement to isolate the 17 pipeline upstream and downstream of the relief 18 device inlet would cause more gas to be blown 19 down or vented every time PSV maintenance is 20 conducted. So PHMSA should consider replacing upstream and downstream isolation valve 21 the 22 requirement with language indicating the relief

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device must be capable of being isolated to facilitate testing and maintenance which would address the concerns. So again, appreciate the opportunity.

5 Good morning. MR. HERETH: I'm Mark Hereth with the Blacksmith Group. 6 I'm here 7 representing INGAA. And I would like to draw a 8 connection between what you'll be doing over 9 the first several days of this week and what 10 you'll be doing later this week with your 11 deliberations around the class location rule.

As you saw this morning, one of the 12 13 largest sources of emissions is blowdowns. And 14 the work that you'll do later this week in 15 providing insights and input to PHMSA to help finish that rule that's been in place 16 them 17 since the early 2000s, since the first cost benefit 18 analysis done for the first was 19 integrity management rule in 2003 -- helping to 20 provide insight to PHMSA to finish that rule 21 will be a most significant way to reduce 22 blowdown emissions. Thank you.

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1 Hello. My name's Matt MR. HITE: Hite. 2 the Senior Vice President T'm of 3 Government Affairs for GPA Midstream 4 Association and I had a quick comment on 5 blowdown emissions.

6 concerns the Mv comment proposed requirements for blowdown emissions in 49 CFR 7 8 192.770. The proposed rule would require 9 operators to use certain methods to prevent or 10 minimize the release of gas to the environment 11 during intentional releases such as blowdowns 12 or venting for scheduled repairs, construction, operations, or maintenance activities. 13 The 14 proposed rule would require operators to 15 document the methodologies used in satisfying 16 these requirements.

17 is that My comment PHMSA should 18 clarify that the documentation requirement can 19 generally be satisfied through the development 20 and implementation of written procedures that 21 apply to the pipeline. There is no need for 22 operators to document the application of the

methodologies used to minimize the release of gas during each specific intentional release that occurs on a pipeline. Such a requirement would impose undue record keeping burdens particularly when applied to routine activities that involve small intentional releases of gas such as pigging or meter run maintenance activities. Thank you.

9 Hi. Erin Kurilla, the MS. KURILLA: 10 American Public Gas Association. APGA 11 represents the nearly 1,000 communities that own and operate their own natural gas system 12 13 around the country. Approximately 90 percent 14 of these communities are served by a single gas 15 transmission pipeline, meaning when there's 16 integrity -- important integrity management 17 work that is performed on those gas pipelines 18 pressure reduction is necessary those and а 19 their delivery is momentarily systems Ι _ _ 20 quess reduced in order for that important work 21 to happen.

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So when we evaluate -- I'd like the

1 Committee to consider when evaluating 192.770 2 blowdowns for transmission pipelines and the 3 design considerations in 199 for relief valves that you contemplate whether truly -- I know 4 5 Congress used the word minimize, but I think functionally they mean reduce. And I think we 6 7 are all very supportive of trying to reduce the emissions from these activities. 8

And so when PHMSA discussed in the 9 10 NPRM the menu of options that these 11 transmission pipelines may have when reducing emission from blowdowns it's not 12 their а 13 limitless activity. It's pick from these very 14 well-thought-out options for minimizing or 15 reducing.

I just want to make sure we don't find ourselves in a world where we're having to do all of the above, not one of the above and that we aren't striving necessarily to do -- to justify why we haven't done all of them when we've picked one of the options that PHMSA has laid out and that we can get these transmission

pipelines -- get the important integrity management work done and then get them back up and running and serving the end-use customers, both to heat their homes and operate their businesses. Thank you.

MR. COYLE: Good morning. 6 My name 7 is Keith Coyle. I'm speaking on behalf of GPA 8 Midstream Association and the American Petroleum Institute. Cameron is going to put 9 10 little visual aid here Ι prepared up а to 11 assist in my remarks. We've also passed out a 12 copy of this for those who can't see. John did 13 suggest I could have sent him a slide for that. 14 Would have saved me some money on a big poster board. 15

16 My comment concerns the preliminary 17 risk assessment that PHMSA prepared for the 18 rule. proposed In preparing the risk 19 proposed rule the Pipeline assessment for а 20 Safety Act requires PHMSA to identify the 21 requlatory and non-regulatory options 22 considered as well as the costs and benefits

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associated with a proposed standard. PHMSA is also required to include an explanation and the reasons for selecting a proposed standard in lieu of the other options considered and to technical data identify the or other information relied upon in meeting its obligations.

8 PHMSA is required to present this 9 risk assessment information to the Committee 10 for peer review. In conducting this peer 11 review the Committee is required to evaluate 12 the merit of the data and methods used in 13 developing the risk assessment and to provide 14 recommendations regarding the risk assessment information and proposed standards. 15

The Committee's consideration of the 16 17 risk assessment is an important part of the 18 rulemaking process. The Pipeline Safety Act 19 requires PHMSA to review and provide a written 20 response to any significant comments and 21 recommendations offered by the Committee within 22 90 davs. also revise the risk PHMSA may

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assessment and the proposed rule based on the Committee's comments and recommendations before issuing a final regulation. This process is intended to promote sound decision-making and ensure that the pipeline safety regulations are technically feasible, reasonable, and costeffective.

8 The stakeholders that Ι represent 9 significant with the risk have concerns We do not 10 assessment for this proposed rule. 11 believe that PHMSA met its obligations to 12 consider the required regulatory and non-13 regulatory options, to identify the relevant 14 benefits, and and to rely costs upon 15 information, appropriate technical data and 16 particularly for newly jurisdictional Type C 17 gas gathering lines that are outside the scope 18 of the rulemaking mandate and Section 113 of 19 the PIPES Act.

20 We will be sharing our concerns in 21 greater details in the coming days as the 22 Committee continues its deliberations. We

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1 believe that offering these comments will 2 the Committee in performing its assist peer 3 review function and ensuring that the final 4 rule is the product of reasoned decision-5 making. Thank you. MR. DANNER: Alan? 6 7 MR. MAYBERRY: Yes, if I may. There 8 was a question that came up from Ben up front 9 about the Section 114 report. And that's still 10 within the agency. It's close to completion. 11 We're considering posting it for public 12 comment, but we're wrapping up just final edits 13 to it. 14 We are -- by the way, it's probably known, but 15 we are late on that one. That's one of the 16 reports that we're tardy on that was due in 17 2022. But anyway, that's where we are. 18 MR. DANNER: All right. So we have 19 received the public comment. I'm now going to turn to the Committee. 20 21 We've heard a number of issues, and 22 Nanney's slide identified three issues Steve

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1 for us to consider: criteria for when blowdown 2 mitigation is required, minimum release volume system-wide 3 criteria and/or а emissions reduction target, applicability of intentional 4 5 releases associated with planned and unplanned work. And then we heard some other issues 6 7 about the terms minimized versus reduced, the 8 definition of documented engineering analysis, 9 a request for a review of the PRIA data, and 10 then the consideration of climate and equity as 11 being beyond the scope of the PIPES Act. 12 And I think there are others I may 13 have missed, but at this point I'd like to open 14 it up to the Committee for any thoughts that members would like to share. 15 16 Andy Drake? 17 This is Andy Drake with MR. DRAKE: 18 I heard a comment that I just want Enbridge. 19 to make sure is out here to help frame the 20 conversations that are going to happen here. Ι 21 think that we're going to get into a lot of 22 details and maybe get up against the tree a

little close and kind of lose context where we are in the woods.

3 The industry trade associations are 4 supportive of moving forward on a rulemaking to 5 reduce methane emissions, period. Okay? Т think the questions that we're going to find 6 7 here -- there have been a lot of technological 8 advancements. We want to take advantage of It's been long time since a 9 those. а 10 rulemaking was proposed in this area. A lot of 11 things have happened. This is а qood 12 opportunity to advance a standard of care and 13 to help improve the consistency of how that's 14 deployed across the industry.

15 Ι think the questions that we're 16 going to be wrestling with are things like how 17 and how fast? And that's not -- those are not 18 trivial questions to be answering for sure. 19 It's going to take a lot of balancing.

The things that caught my attention in my discussion is -- I hear a lot of things that sound very much like aspirational goals.

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1 going to eliminate all immediately. We're 2 Those are not going to be practicable. So at 3 the end of the day when we have to vote on is 4 is it cost-efficient, it something, 5 practicable, is it reasonable? I think those 6 are things I want to try to get answers to 7 myself as we listen to this group. And I think we're going to hear a lot of information about 8 9 that. 10 But I just wanted to throw that out 11 there because we're going to start talking about things in detail. I mean, it's not like 12 13 we don't want to do this. We do want to do 14 What we're trying to figure out is how this. 15 it to do practicably, reasonably, and 16 effectively. Thank you.

MR. DANNER: Thank you. Any other members wish to start comments? Chad Zamarin? MR. ZAMARIN: Thanks. Chad Zamarin with Williams. Maybe just to get -- dive into a couple of those issues that were raised.

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1	I do think we should be thoughtful
2	about kind of redefining engineering standards
3	for relief valve installation and just I
4	think it's been said, but I mean, we have
5	requirements in the code, very detailed
6	requirements on the installation of relief
7	valves. And so I think just simple language,
8	like I'm not sure why you have to you've got
9	here in 192.199 proposed all new, replaced,
10	relocated, or otherwise changed relief limiting
11	devices must be designed and configured. And
12	this has been a comment made as demonstrated by
13	an engineering analysis to minimize unnecessary
14	releases of gas.
15	Those kinds of additional
16	requirements that aren't well-defined may not
17	be necessary. I think we've got specific
18	prescribed requirements for how and where and
19	why we install relief valves, so you could
20	probably just strike that and you're still
21	achieving the intent is there that it must
22	be installed in a manner that is configured to

minimize unnecessary releases, but you're not inserting an undefined additional requirement, which is an engineering analysis.

And so I do think that comment is 4 one that should be thought of as we go through 5 all of the language because it was said earlier 6 7 in most rulemakings we're updating rules that 8 have been in place for 50 years in many cases 9 and have evolved over 50 years. Here we're 10 kind of taking the car from 0 to 60 verv 11 rapidly and we're creating an entirely new set 12 of requirements. So I think that's one to 13 focus on.

14 And then in that same section I do 15 this idea of requiring think being very 16 specific around isolation valves, around relief 17 valves again there are literally likely _ _ millions of relief valves across the pipeline 18 19 industry. And they have been installed over 20 decades and there are configurations that Ι 21 think -- we have to be careful we don't try to 22 specify.

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1	I thought one of the comments that
2	were made just instead of saying how you
3	have to install or where you have to install
4	those isolation valves a comment like having
5	the ability to isolate the relief valve for
6	maintenance or for inspection I think was the
7	intent. Instead of specifying exactly that
8	configuration it may just make sense to specify
9	what the intent is that you're trying to
10	accomplish, recognizing there are a lot of
11	different configurations for how it might be
12	done. Thank you.
13	MR. DANNER: Erin Murphy?
14	MS. MURPHY: Thanks. I think my
15	comments are going to be primarily on the
16	blowdown mitigation portion of this section.
17	I did want to just start with a
18	little bit of context-setting, thinking about
19	all the public comments we just heard from,
20	which were I think entirely from gas pipeline
21	industry operators and trade associations.
22	I hope that throughout this
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1 Committee's deliberations and discussion this 2 week we can also keep in mind the thousands of 3 comments from members of the public from all 4 over the country that were submitted to this 5 agency and this rulemaking docket really calling on PHMSA to -- first of all supporting 6 7 PHMSA's strong proposal and calling for а 8 really strong final rule that will improve 9 and mitigate harmful public safety methane 10 emissions that contribute to climate change. 11 So I hope that we can keep that in the back of 12 our minds, just the real outpouring of support 13 that we've seen across the country for a strong 14 rule.

On blowdown mitigation in particular 15 16 Ι think establishing clear requirements and 17 for operators to minimize processes gas 18 releases during pipeline operations will reduce 19 harmful methane pollution and wasteful product 20 We know that there are well-developed losses. 21 work practices and commercially-available 22 technologies that allow to operators reduce

blowdown emissions by more than 50 percent.

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I wanted to talk a little bit --2 five identified methods in the 3 there are 4 proposal for operators to choose from the 5 mitigate blowdowns and operational releases. Four of those methods reduce methane emissions 6 7 by reducing the amount of gas released from the 8 system during a blowdown while the fifth, which 9 is flaring or combusting the natural gas, does 10 reduce the climate harm from directly releasing 11 methane, but is nevertheless a highly polluting 12 process which also wastes the through gas 13 flaring.

14 And flares do not always combust all 15 of the natural gas at the flare. So sometimes 16 the actual emissions reduction might be less 17 than what's optimal. And because of that sort 18 of trade-off in a series of comments that were 19 filed by environmental organizations including 20 EDF, we recommend that flaring be sort of a 21 last resort in that menu of options. And so 22 think about rather than just five options on

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the table whether there's a way to sort of tier those options in a final rule to recognize that some of them may be more effective than others and that those most effective options be prioritized before moving to flaring again as sort of a last resort.

I also wanted to mention in addition 7 to those five methods for blowdown mitigation 8 9 that are articulated in the proposal there is 10 this alternative pathway that's available in 11 the proposal. I think I have some concerns 12 with that just in the -- PHMSA articulated in 13 proposed rule these five known methods, the 14 some of which are fairly open-ended in that 15 there are multiple technologies, that could 16 sort of satisfy and fall within some of those 17 methods.

And if those are the proven methods that are known and make sense for industry to pick up to mitigate blowdown emissions, does it really make sense to have an alternative pathway when it's not clear what those options

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1 would look like and it doesn't appear -- there 2 doesn't look to be а lot of accountability 3 right now in the proposal for how choosing that alternative would work? 4 5 So I think one option I'd hope the Committee might think about today, that we can 6 7 discuss, is whether a recommendation of either removing that alternative or some modifications 8 9 if operators to ensure that select that 10 alternative they really would be maximizing the 11 mitigation of gas released. Thanks. MR. DANNER: All right. Thank you. 12 13 Steve Squibb? 14 Squibb, MR. SQUIBB: Steve City 15 Utilities of Springfield, Missouri. Ι just 16 wanted to comment on the term minimize releases 17 emissions. Ι think that could be or misinterpreted to think that we have endless 18 19 resources and endless -- there's no limitation 20 to minimize. And the term reduction would be 21 more appropriate. I think that was -- meets 22 the intent of the mandate. But to be careful

1 of minimization, that that could be -- there's no -- could be no limit and we have -- to think 2 3 that we might have unlimited resources. То 4 fully minimize emissions is unreasonable. Thank you. 5 All right. Thank you. 6 MR. DANNER: 7 And, Brian? 8 MR. WEISKER: Good morning. Brian 9 Weisker with Duke Energy representing the 10 industry and this is -- so I'm a first timer 11 here, SO this is really a process question 12 because we're kind of bouncing between relief 13 valves and blowdowns. And so I don't know 14 if there's -- as we work our way through the 15 comments and language we stick -- can we stick 16 with -- do relief valves first and then maybe 17 do blowdowns, or vice versa just to keep us in 18 a swim lane, so to speak? 19 No, I appreciate that. MR. DANNER: 20 The problem is I don't know that I have made an exhaustive list of what all the issues are and 21 22 I don't want to foreclose any discussion. But

1 I think you're right. I think we could start 2 with the three that Steve Nanney put up on the slides. So first is criteria for when blowdown 3 4 mitigation is required. And maybe we just 5 focus on that first and we'll move onto the next issue. 6 7 Is there anyone who wants to talk 8 about that? Chad's got his tent up. 9 think MR. GILBERT: Yes, Ι that 10 follows kind of Erin's comments about 11 blowdowns. And maybe on the topic I think one 12 thing that was important that was said during 13 the public comment period -- I mean the best 14 way to minimize the emissions of blowdowns is 15 to minimize blowdowns. And I think the class 16 location rule. There are other requirements. 17 of Blowdowns are primarily performed because 18 planned maintenance. That's typically а 19 requirement somewhere else in the code. 20 Class location changes is a great 21 example. We've been talking about that for a 22 long time now, but the unnecessary replacement

1 of pipe creates the requirement for a blowdown. 2 And if we can demonstrate that we don't need to 3 replace pipe and we can manage integrity 4 doesn't through а means that require а 5 Ι think should do blowdown, we that. And 6 that's why that rulemaking is really important. 7 And other advances to the regulations that 8 allow for in-service maintenance is really 9 important because again that's the best way to minimize emissions from blowdowns. 10

11 Т do also want to just comment 12 though -- and I'm interested, Erin -- I would 13 have thought -- I'm not an environment expert, 14 if you could have brought but even the emissions of blowdown down by let's say more 15 16 than 50 percent, it would seem to me that any 17 time you can combust methane it's better than 18 when you just vent it to atmosphere. And so I 19 think we've got to be careful that we don't 20 kind of allow for the opportunity to focus on 21 the end result, which is if you can demonstrate 22 can minimize emissions through that you any

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method possible, then that should be I would think the preferred path for utilization.

3 Because my -- the work that at least -- my understanding is that any time again that 4 5 we're combusting methane, if we have to release it, and even if we can minimize it, any time we 6 7 can combust it, it's better than just releasing 8 methane to atmosphere. So I'm interested if 9 that's not the case why we might want to just 10 kind of push people away from using flaring if 11 it does in fact have a good use in those kinds of alternatives. 12

13 question of minimum On the а 14 threshold I do think it makes to have a minimum 15 threshold. There very small pieces of are 16 equipment that could require releases for 17 inspection and maintenance activities. I don't 18 know that that's even practical. If you're 19 blowing filter down а separator in а 20 compression station yard I think that you don't 21 want to have a rule that pulls in I think 22 things that aren't practical and frankly just

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don't really make a whole of sense.

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2	So something like a I think there
3	were commenters that proposed 1 million cubic
4	feet per day, or a million cubic feet I think
5	might have been a proposal. I think that makes
6	a lot of sense to try to focus on what the real
7	issue is. And it's the large operational
8	releases when we're blowing down sections of
9	pipeline for maintenance. I think that's the
10	intent. And if it is, I would encourage us to
11	think about a lower threshold like that. Thank
12	you.
13	MR. DANNER: Thank you. Erin?
14	MS. MURPHY: Thanks. I was going to
15	say a couple minutes ago I appreciated Brian's
16	comment on order and was going to ask if we
17	could put these slides up as we go, so I
18	appreciate doing that. I think that will be
19	helpful throughout to keep us on track.
20	Just briefly on sort of the criteria
21	for when blowdown mitigation is required. I
22	think to me PHMSA has it right in the proposal

1 that blowdown mitigation is always required as a matter of course unless in the event of an 2 3 emergency. So from our perspective that -- or from my perspective that is appropriate. 4 5 And, Chad, just in direct response comments, I don't think we're 6 in to your 7 disagreement and if I was unclear when I said -8 - was articulating that from our perspective 9 flaring should be the last resort, that's the 10 last resort of the options that operators would 11 be choosing from to mitigate a blowdown. Of 12 course direct venting of natural gas is the 13 absolute last resort and what we're trying to 14 avoid here. 15 And just to be clear, I MR. DANNER: 16 think you mentioned flaring should be used only 17 when other options are determined to be unsafe 18 or impractical. I think those were the words 19 you used. Yes. 20 Okay. Diane, did --21 MS. BURMAN: So I just really wanted 22 to make some -- what I see for myself as level-

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setting in this conversation.

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First, I want to thank PHMSA staff and PHMSA in general for all that you're doing and for the public's comments and the Committee here.

For me, when I look at all of this, 6 7 it's really important that I focus on the fact 8 that the integrity and reliability of our 9 natural gas system is paramount, and at the 10 core of that is gas safety. And I look at this 11 as -- my focus as a state regulator is on how 12 important pipeline safety is to everyone: 13 regulators, the public, the gas companies, and 14 And Ι have a fiduciary consumers. qas 15 responsibility to the rate payers and also to 16 looking at how we're doing things that help to 17 move us forward.

So for me, it's important to focus on -- to be a truly engaged regulator on both the historical and the present context of our energy regulations. And I understand that it's a continuous process. And doing this can

really help shape our understanding of our desired future regulatory needs.

3 My kind of focus here is that I want 4 to be mindful of our regulatory powers, both 5 focus federal and state, and on usina judicially those powers and not to be reactive, 6 7 but to help develop policies and set up the 8 frameworks to implement so that we're truly 9 moving forward. And so for me, I look at 10 some of the things as what are we really trying 11 to accomplish and how can we have many 12 different tools in the tool kit that we can 13 choose from so -- and broadening it. Rather 14 than saying you must do X, or you must do all, 15 being mindful of being very clear as we're 16 looking at things in that there is a process in 17 needing to have many different alternatives to 18 and to also look address at _ _ obviously 19 needing to explain the rationale on why someone 20 is something, needing using to qive 21 opportunities to show accountability, but to 22 really not be too prescriptive that we lose

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sight of the goals.

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2	I do think that there is confusion
3	on a lot of the terms: minimize, reduce, now
4	maximize, and looking at what that is to ensure
5	that we are all speaking the same language.
б	And I am concerned really about looking at what
7	how are we truly assessing things? There
8	are different studies that are out there.
9	There are different sort of requirements. And
10	making sure that we are being careful in our
11	assessments and our assumptions to make sure
12	that we're really helping to move the ball
13	forward. So that's just really where I'm
14	coming from and just wanted to sort of level-
15	set from that.
16	MR. DANNER: All right. Thank you
17	very much.
18	Sara Gosman?
19	MS. GOSMAN: Okay. So I want to
20	make some opening sort of comments or just
21	share some thoughts on climate change and then
22	move to the issues around blowdown mitigation.

So I mean I think we all recognize here that climate change is the defining environmental crisis of our time, right, that what we are doing here is addressing a problem that has gotten so much worse over the course of certainly my lifetime.

look at 7 when we And so actually 8 changing the regulations to address this issue 9 already in crisis. think we are And Ι 10 understanding terms like reasonableness or 11 practicality in that context is really 12 important to our discussion. So -- and all we 13 do is look to the climate have to change 14 benefits from this rule to just see what those 15 otherwise costs would be, right, to the world 16 of climate. So I think that's really important 17 our standard in terms we look at of as 18 practicability practicality, right, or 19 reasonableness, taking the climate issues into 20 account and front and center, obviously not 21 wanting to at all impair safety, but again sort 22 of focusing on climate.

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1 And then I also want to just make a 2 point, since I am a law professor, on risk 3 assessment and that particular process because I know it was raised in the public comments. 4 Ι 5 think as we think through the information that to provide us to 6 PHMSA needs and we need 7 consider need to also think about we what 8 Congress required of PHMSA. So Congress has 9 specific requirements in the PIPES Act. In 10 thinking about regulatory and non-regulatory 11 options we have to take into account what 12 Congress wanted PHMSA to do.

13 All And then specific right. to 14 blowdown mitigation. So I'll note that the way 15 this is constructed is that operators are 16 choosing methodologies or technologies and --17 but we're not setting a performance standard. 18 That is, we don't know what that end result is 19 going to be in terms of a reduction in release 20 So I think ideally we would have a volume. 21 standard that actually looks to the question of 22 the performance of these methodologies. And I

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1	think it's built in this 50-percent
2	reduction into the alternative methods as one
3	way of approaching that.
4	And then I think on this question of
5	alternative methods I also would like to see a
6	reconsideration of that that requires some more
7	a PHMSA review and approval of these types
8	of methods.
9	Finally, on flaring I agree that we
10	should leave flaring on the table, but only
11	when other options are impractical or unsafe.
12	I think that is an important piece of this.
13	Thanks very much.
14	MR. DANNER: All right. Thank you.
15	Arvind?
16	MR. RAVIKUMAR: I want to thank
17	PHMSA for all the work that they've put into
18	developing this proposed rule. I have a couple
19	of comments.
20	I want to first start with a broader
21	comment on Mark's presentation earlier. We
22	have done some research in the Eagle Ford Shale

1 on emission from gathering pipelines and what 2 we are finding is that the benefits from VOC 3 reductions associated with methane mitigation can be as large as the direct benefit from 4 5 methane mitigation itself. So I know it's not considered in the cost benefit analysis, but 6 7 that's a big portion of benefits in reducing 8 emissions from gathering pipelines especially 9 in regions where gas compositions can have a 10 lot more VOCs.

11 Coming back to the blowdown emissions 12 discussion, Ι with Mr. agree 13 Zamarin's point about having some minimum 14 threshold for release these regulations 15 particularly because again and again as we have 16 done measurements we have found that the 17 majority of the emissions are from a very small 18 number of large emission events. And so it 19 makes sense to have some threshold. So this 20 doesn't apply to many of the smaller releases. In addition I also think it makes 21 22 sense to have a quantity of emission reduction

1 volume thresholds that's -- in this rule that 2 says system-wide emission reduction target for 3 a couple of different reasons: So blowdown 4 emissions is one of those emission categories 5 where the emission volume can be reasonably accurately estimated using line pressure 6 and 7 other parameters. And so a setting a systemwide emissions reduction target would help us 8 calculate over time how much reductions have we 9 10 achieved based on the operations of -- any of 11 the options that the operator might take to reduce blowdown emissions. 12

13 And I think this is really helpful 14 because as we've been discussing about these 15 alternative methods we don't know what future 16 technology's going to be developed. We've seen 17 significant and rapid development in methane 18 emissions reduction technologies that are 19 being deployed across currently the supply 20 chain. And so having a target of emissions 21 reductions would help bring in many of these 22 alternative methods that might be available in

1 the future so that we can evaluate all of them 2 based on the emissions reductions. 3 I think the second reason is someone 4 brought up the point that the word minimize is 5 vague and having an emissions reduction target would help address that issue as well. 6 7 All right. Thank you. MR. DANNER: 8 Chad? 9 MR. ZAMARIN: Thanks. Chad Zamarin. 10 And maybe just for a little bit of context to 11 help and explain my view on what we may need to be considering here, because I actually think 12 13 we need more flexibility. I mean, we are only 14 -- and as Arvind mentioned, we're only a few 15 into aggressively going after methane years 16 emissions in the natural gas space. I mean we 17 just started doing recompression of blowdowns 18 in earnest over the last 24 months. And so the 19 technology is evolving rapidly. But I can also 20 tell you there are many cases where it's not 21 practical and it would have significant adverse 22 effects.

1 So the last 10 years we've increased 2 gas demand in the United States by 60 percent. 3 We've increased pipeline capacity by 27 percent, storage capacity by 17 percent. 4 The 5 infrastructure is at its limit and if we're not careful, we will create requirements that will 6 7 lead to -- we're already seeing it. 8 Ι mean, we're seeing over the _ _ 9 past three years we've seen reliability issues because of lack of infrastructure. We've seen price dislocations that have occurred. We have pipelines that are single-feed pipelines into

10 11 12 13 cities and municipalities where if you are 14 required to do things that we're saying you 15 have to do here, you would put pilot lights out 16 and you would cause much greater risk to the 17 community than you would benefit to the 18 environment.

19 So we have to be careful. We have 20 to recognize the practicality of things and we 21 have to create the flexibility. I think if we 22 can all agree we have the same goal: minimizing

1 emissions while maximizing reliability and 2 affordability -- I mean it is a complex 3 equation. It's not -- we can't achieve any one 4 of those independent of the others. And so 5 that's my concern with this section. I think 6 it's an area where we need to -- we are just 7 minimizing emissions starting on through 8 blowdowns. And to get so prescriptive and 9 think we have all the answers today I think 10 really limits our ability to advance the 11 technology and the capabilities.

12 And so I actually would advocate for 13 more flexibility, not less, not _ _ less 14 prescription, not more, because again this is 15 evolving very rapidly and if we're not careful, 16 we're going to mandate things that are going to put is in a box that we'll never get out of. 17 18 heard that from the administrator, And we 19 deputy administrator, that this is -- we are 20 setting the foundation for what we need to 21 evolve over the next several decades, not --22 this is not the final answer. And so I would

1 just encourage us to think that way. Thank 2 you. 3 MR. DANNER: All right. Thank you. Andy Drake? 4 5 MR. DRAKE: Andy Drake with Just like to come in behind Arvind. 6 Enbridge. 7 I think you're exactly right, Arvind. We need to set a minimum threshold. I think the PRIDO 8 9 proposition would tell us that's the logical 10 thing to do, otherwise we're going to get a lot 11 of energy going into very small things that 12 don't make a lot of value. And my comment 13 actually was really going to be more along your 14 line. 15 I think the thing that we have to be 16 conscious of here is our accountability in this 17 is to provide some guidance for PHMSA to give 18 practicable advice and quidance to some the 19 enforcement folks on how to play this out. And 20 I think that one of the things that I think we 21 should be really thoughtful about is the 22 balancing act here that operators have to face,

and that is the reality of providing heat and service to communities. And we've heard that. I think there should be some provision in this discussion.

5 I'm worried about is What. we're going to get in a cat fight in an enforcement 6 7 proceeding about did we do it right? And it's 8 like, okay, we are trying to consider 19 9 different things here. Did we weigh them all 10 exactly right? That's I think something we're 11 going to have to provide some guidance to, but one of them is did we consult with the PUC 12 13 that's going to be affected by that work, and 14 did they help us make a decision about customer 15 service and reliability issues that we needed 16 to take into consideration for how long that 17 pipe was going to take to bring down, which 18 affects their service?

And I think -- so as we look at criteria for what choices we make I think it's who has the D? Who we are getting advice from to make that decisions so that it doesn't end

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up just being an enforcement discussion. I'm looking at Rod because he knows what I'm getting at. I mean yes, this is going to be did you do it right or not? It's like, well, we tried. We talked to everybody we could think of. We're trying to do the right thing.

7 equipment available? Was We 8 checked. It wasn't. Well, should we wait? 9 called the PUC and said Well, we the 10 equipment's going to get here in two weeks. 11 You going to be okay with that? Because they're 12 going to be out until then.

13 We need some way to provide guidance 14 to how that conversation is going to happen so 15 when the enforcement discussion happens that 16 it's not a cat fight. It's did we walk through 17 things logically? Did we consider the 18 appropriate things, were the right people 19 counseled, and was a reasonable decision made? And I think that's -- it's not all or none. 20 21 It's just did we go down through a process that 22 was appropriate and include the right people in

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that conversation and reach a reasonable conclusion?

3 MR. DEWAR: So, if I may opine? Ι 4 mean the issue seems to me we -- we're talking 5 about, okay, what are the minimum release volume requirements? Well, I mean we currently 6 7 have some in the proposed rules that just say 8 if it's not significant. Everything above is. 9 So where do you set that? That might be the 10 cat fight that you're trying to avoid.

11 Minimize versus reduce. The problem 12 is if you're reducing just a little bit so that 13 you can check the box when you could have done 14 a lot more, that doesn't work either. So maybe 15 what we're trying to find here is some 16 precision in language. But I also don't want 17 to just in the name of flexibility reduce all requirements for carbon emissions 18 the and 19 getting as many carbon emissions reductions as 20 we can. That's the concern that I have. So 21 thank you.

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MR. DANNER: And because there are

1	no more tent cards up, let's take a short
2	break. Well
3	PARTICIPANT: What about
4	MR. DANNER: Okay.
5	PARTICIPANT: the new guy?
6	MR. DANNER: I just and I'll say
7	Brian is in between us and break.
8	MR. WEISKER: All right. Real
9	quick.
10	Brian Weisker, Duke Energy, between you and
11	break. But just we got to be we have to
12	think of where is a ceiling, or floor, whatever
13	you want to call it, but a 50-percent reduction
14	isn't equal across all releases, right? So a
15	50- percent reduction of a 0.5 cubic feet
16	release is if that's the standard, then
17	we're then it's an extremely low level of a
18	release we're talking about. So I think there
19	has to be some level I think of a number that
20	sets that floor
21	So we can go on break now
21 22	MD DANNED: All right Wolke on
44	MR. DANNER. ALL right. We're on

1	break now. How long do you want to take?
2	MR. MAYBERRY: Ten minutes?
3	MR. DANNER: Ten minutes. Let's
4	come back at
5	MR. MAYBERRY: Let's do 11:00.
6	MR. DANNER: All right. Come back
7	at 11:00. That's a 20-minute break.
8	(Whereupon, the above-entitled
9	matter went off the record at 10:43 a.m. and
10	resumed at 11:17 a.m.)
11	MR. DANNER: All right, we said we
12	would reconvene at 11:15, and we're late. But
13	we're hitting the ground running.
14	So, Andy Drake, do you want to
15	start?
16	MR. DRAKE: In the interest of
17	providing a pinata for the proceedings of the
18	group here, I'll throw out some thoughts. I
19	think that something just put some words up
20	here tangible that we can look at. I think
21	that we heard a lot of good things in the
22	conversation earlier, and I'm trying to reflect

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those.

2	I think setting some sort of minimum
3	threshold is important; trying to balance the
4	needs of customers and impacts to society is
5	also important, as well as the impact to the
6	environment.
7	So with that, I thought I'd make a
8	proposal that we could put up some language
9	here, it's something like a blowdown. That
10	this section applies for any intentional
11	release of gas that would exceed 1 million mmcf
12	for non-emergency blowdowns.
13	Arvind, I appreciate you at least
14	putting that number out there.
15	If we want to break that down by
16	segment of the industry, that's something we
17	can talk about, but to just throw out a number
18	here to start the conversation. And the
19	exceptions would be if there would be any delay
20	in emergency response or would result in a
21	safety risk or impact to customers.
22	I think that will help at least as

1 just a starting point to a conversation with 2 other stakeholders here that may be affected. 3 To at least -- so take some of the weight, you of the discussion happening in an 4 know, 5 enforcement environment and sort of sets up some sort of goals and process that we would 6 7 work through, that can help alleviate some of 8 the angst in enforcement. 9 Anyway, Ι thought I'd just throw 10 that out there just to at least start а 11 conversation here on the table. 12 MR. DANNER: And by impact to 13 customers, do you mean a service disruption of 14 an extended time? 15 MR. DRAKE: I'm really looking more 16 for, again, I'm looking more at the end and 17 trying to work backwards. In an enforcement 18 discussion was the process is -- was there some 19 sort of due process of consideration for the 20 impact to a customer given, that the operator 21 talked to the PUC, an end user, a customer, to 22 make sure that they're okay with this schedule,

1	that this schedule to accommodate a scheduled
2	pulldown was appropriate, didn't have an
3	extraordinary impact on service and society.
4	MR. ROSS: Robert Ross here
5	(Simultaneous speaking.)
6	MR. DRAKE: tests.
7	MR. DANNER: So hang on, hang on.
8	Did you have a question?
9	MR. ROSS: Absolutely, and also an
10	observation. My name's Robert Ross. I'm
11	Assistant Chief Counsel for Reg Affairs.
12	One thing that could be, and, Andy,
13	I acknowledge that you had the unenviable task
14	of, you know, like coming up with the proposal
15	and presenting it. One thing that could be
16	beneficial for the consideration of the
17	committee is not just an identification of the
18	proposal, but then also the basis therefore.
19	For example, like, insofar as
20	there's a minimum threshold that you've
21	floated, is there a basis in, you know, like
22	safety cost, what have you? Because, you know,

like as PHMSA if and when PHMSA considers
or as PHMSA considers, you know, like, any
recommendation by the committee for a certain
threshold, we're going to need to be able to
justify that threshold, you know, like, so.
MR. DRAKE: I absolutely expect that
will be the next conversation that happens
around this table, is where did the million
come from. But I think Arvind had some data
there where the industry's filed some comments,
and we certainly can flesh those out.
MR. DANNER: Okay. Andy, was that -
- do you have more?
MR. DRAKE: I think Chad does.
MR. DANNER: So we're at one, two,
Chad, do you have a three and a four?
MR. ZAMARIN: No. This is Chad
Zamarin. I just wanted to follow up to Rob's -
- I don't know if it's Bob or Rob, what you go
by, sorry, but his comment.
I think on the threshold, I do think
intent matters. And the intent is, as we

discussed, is to not focus on small sections of pipe, small pieces of equipment that could get caught up and that, frankly, when releases occur, are very, very small.

5 And so it is intended, I think, you know, what we know is that the single largest 6 7 contributor of emissions, methane emissions, 8 are the blowdown of valve sections, or long 9 sections of pipeline for pipeline maintenance. 10 And so I think the purpose is to focus on those 11 and make sure that we're putting our effort on 12 where the impact is greatest.

And we've done some quick analysis that would say that that would exclude small pieces of equipment inside a compressor station yard, but it would not exclude large-diameter pipe and longer sections of pipeline.

18 MR. DANNER: All right, thank you. 19 Sara? MS. GOSMAN: 20 Yes, just a clarifying question here first. So the exception that 21 22 who makes the you've there, put up

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determination that that exception is correct in your proposal?

3 MR. DRAKE: I think this is a really 4 qood question. We talked earlier about who has 5 the D. I think this is really more of a -- to 6 you're setting me up was an appropriate 7 conversation held.

8 It's not trying to put weight on the 9 customer or the PUCs that they would decide just 10 this. It's getting data back to the operator to make the decision, is that customer 11 12 impact unacceptable. And then I think as far 13 as from an enforcement standpoint, it's was a 14 conversation held with the customer to 15 determine, make that determination.

So to me, it's not putting off on somebody else that decision. It's not trying to say, you know, some other stakeholders told us to do this. No, I think this is still the operator's decision. It's just trying to make sure that an appropriate discussion was held to make that determination.

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1 MR. DANNER: Sara? 2 GOSMAN: MS. Okay, just so to 3 respond. I mean, the language up there is very 4 broad, and I'm concerned that, you know, result 5 in a safety risk or, I assume, any impact to customers. That seems like a large exception 6 7 to what we're talking about. So I'm wondering 8 if we can restrict that language further to 9 address the critical reliability situations 10 where we need this exception. 11 And then I quess just to also 12 address the minimum amount here for mitigation 13 on blowdowns. I would prefer to see this done 14 So transmission by type of pipeline. here 15 different than distribution being and 16 gathering. So that's, you know, maybe we need 17 to defer to PHMSA on what those numbers are, 18 but I think we as a committee should agree that 19 we need to think about this different system by 20 different system. 21 And then finally, I'd like to add to 22 this list, and I'd like to have us actually

1 vote on language that operators are limited to 2 using flaring when the other options are 3 impractical or unsafe, would be the language 4 that I would put up there. Thanks. All right, thank you. 5 MR. DANNER: Chad and then Andy. 6 7 Thank Chad MR. ZAMARIN: you. 8 Zamarin. Just on maybe starting at the end 9 there, Sara, I would be very careful on that 10 kind of language. Ι mean, again, when we 11 recompress to minimize the emissions from а 12 blowdown, we often don't bring that to zero. 13 So we are looking at scenarios where 14 bring the pipeline down as far we can as 15 possible through recompression, and then there 16 may be some minimum methane emissions that have 17 to be vented. I think it makes sense in those 18 cases to explore combustion technologies that 19 further reduce emissions. 20 So Ι think we've be qot to 21 thoughtful of how _ _ Ι think the intent Ι 22 totally agree with. But I think it's a tool

1 that we are evaluating as not always an 2 exclusive tool, but oftentimes as the way of 3 further reducing that last portion of methane 4 emissions that you can't reduce otherwise. 5 So maybe we need to think about how that would be considered because I think you'd 6 7 want to be careful that you don't have somebody 8 say hey, I could have -- I could have reduced did one 9 emissions even more, but Ι of the 10 methods and I got to, you know, a reduction. 11 And if I'd done flaring on that final, you know, amount of gas, I would have done more. 12 13 But the rule is mis- maybe intended in that 14 scenario. I'll pause there and maybe come back 15 16 to the other issues since I think you may want 17 to that. 18 So before we do, Chad, MR. DANNER: 19 is that something that could be just taken care 20 of by identifying that situation? 21 MR. ZAMARIN: Yeah, Ι think 22 again, I don't know what the language would

1 need to look like, but I think that, again, I 2 think we need to be careful that we don't put 3 flaring kind of as a standalone, you know, tool 4 that doesn't have a place in emissions Because I do think we are all 5 mitigation. tools 6 looking at low to try to qet as as 7 possible. And it's almost never where you can eliminate from a blowdown emissions entirely. 8 So I do think the --9 10 (Simultaneous speaking.) 11 MR. DANNER: But, yeah, but there's, 12 you want to be careful of the language doesn't create a loophole so that everybody can flare 13 14 to their heart's content. 15 MR. ZAMARIN: Sure, but one thing --16 I mean, a great example is if you can reduce 17 emissions by half, let's say, in an event, I 18 mean, the difference between flaring and not 19 flaring has an impact of 10 times benefit from 20 an emissions perspective. 21 So you might just recompress versus 22 And, again, I think if the issue is flare.

emissions, if that's what you care about, that should dictate, you know, with the practical tools that you have, the cost that it would take, the impact that it would have, the goal should always be the greatest reduction of emissions possible.

7 that flare Ιt may be а would actually 8 reduce emissions more than 9 recompression would. But when you start saying 10 things like, you know, it's the tool of last 11 resort, I think you could have unintended 12 consequences that don't actually achieve the 13 So I don't know how you address same goals. 14 do think we that, but I need to be very thoughtful and careful here. 15

16MR. DANNER: All right, thank you.17Andy?

18 MR. DRAKE: This is Andy Drake with 19 Enbridge. I think that's a great point. This 20 is a combination of tools. It's not binary and 21 we're just going to pull down and that's, all 22 the way to zero, that will not happen. It will

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be a combination of tools. Even if we're pulling down as best we can.

3 I think that one thing that we might want to throw out here is some -- and I think 4 you were hitting that a little bit, that was an 5 overarching goal, I heard that from you, too, 6 7 And that is, back away from the Sara. 8 treatment and look at what are we trying to 9 accomplish here is a reduction, a reduction in 10 greenhouse gas emissions.

So do we set some sort of target to keep ourselves on point? And I don't know that we can do that in the rule. I mean, that might be kind of cumbersome, or at least myopic anyway, but in the rule.

But do we set some guidance as part of this committee's accountability to PHMSA to do a study, to define a base year, and then what is the volume in the base year, and then start, keep revisiting are we making progress against that goal of getting to a percent reduction.

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1	So I just want to throw that out
2	there. That may not be in the rule anyway, and
3	I'm not proposing that that be added to the
4	voting slide other than maybe some guidance to
5	PHMSA. So I just throw that out there.
6	MR. DANNER: All right, Erin, then
7	Sara, then Arvind, and then Diane, and then
8	Alex. And you'll be clean up.
9	MS. MURPHY: Erin Murphy, with EDF.
10	Just to kind of run down the list of the items
11	we've been discussing. I think on number one
12	from Andy's proposal, I don't feel comfortable
13	with the 1 mmcf as a minimum sort of threshold
14	for blowdown mitigation.
15	I want to note that, you know, in
16	another section of the PHMSA proposal, is that
17	reporting threshold for large volume releases
18	where the agency proposed 1 mmcf, and a number
19	of environmental organizations, as well as a
20	number of other public commenters, really were
21	emphasizing a lowering of that reporting
22	threshold that a large volume release be

considered 0.5 mmcf.

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So I want to note that, which is a
different part of the proposal, but I think for
me sort of carries over here that at least, you
know, 0.5 mmcf be a starting point.
But I also want to elevate Sara's
idea as well, that it might be worth
considering sort of breaking this out across
transmission gathering and distribution
pipelines.
And it feels to me like we might not
have all of the sort of technical information
before us as a committee today to make a
precise numeric recommendation. And perhaps it
would be helpful for the committee to just
recommend that PHMSA evaluate and finalize a
more sort of set threshold for when blowdown
mitigation is obligated if the committee wants
to recommend that.
And then on the second point on sort
of the exceptions. This exception feels really
broad to me, and I'm kind of echoing Sara here

that as written, it's not clear sort of where the responsibility lies.

3 And I think that one thought I have 4 is that this be built into reporting by 5 operators associated with blowdown mitigation practices, that if an operator determines that 6 7 there is some sort of emergent situation that 8 prevents mitigation of a blowdown, they sort of 9 explain that situation to the agency. And then 10 the agency can review that and determine if it 11 was appropriate. And maybe that information that the operator would compile and submit, you 12 13 know, might include information that, that they 14 from customers, or received from emergency 15 responders, or something else.

16 And then on, you know, support for item number three, and I just wanted to react a 17 18 little to some of Chad's comments earlier. Ι 19 think, you know, total agreement that blowdown 20 mitigation, you know, ideal blowdown mitigation involves 21 multiple work practices and 22 technologies, and sort of a combination of sort

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of what fits for a given situation.

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2	And I just want to reiterate that,
3	you know, at least my recommendation and
4	perspective is not that flaring is not an
5	option, but that flaring is sort of a last
б	option so that an operator evaluates and
7	implements the other four sort of, you know,
8	buckets of methods that are articulated in the
9	proposal first.
10	And then I think to your point that,
11	you know, sometimes recompression or something
12	else, then you're still, you know, left with
13	some gas that would otherwise be vented. Like,
14	that's when flaring can sort of come in to do
15	the rest.
16	MR. DANNER: All right, Sara?
17	MS. GOSMAN: Yeah, so Erin stole a
18	lot of my thunder, so I think I'm just going
19	to, going to add one more thing here, which is
20	I think that it would be, you know, our goal
21	here is to reduce methane emissions across
22	systems during blowdowns. And what we're doing

is we're sort of taking this blowdown by blowdown, and trying to sort of figure out what the correct response is.

I think to build on what Andy was 4 5 is a role here for saying, I think there 6 reporting information to PHMSA that would help 7 to actually set standard overall us а for 8 systems, which I think would give some flexibility to operators to do things like, you 9 take into account sort 10 know, of reliability 11 issues.

So it would be a big change to the regulatory proposal, and I don't -- I don't want to do that. But I do think I want to add a number four here, which is that report -that operators would be required to report the reductions in release volume for each blowdown to PHMSA.

MR. DANNER: All right, thank you.
Arvind?
MR. RAVIKUMAR: Yes. I want to sort

of build on what Andy had talked about earlier.

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I think providing operators different options to reduce emissions from blowdown, depending on the state of the facility or the type of the operation, is important. But to achieve that, I think what would be useful to add to this is an overall systemwide emissions reductions target, 50 percent, or some other number that we all agree on.

9 And the reason is once you have a 10 target, then it doesn't matter what method you 11 to reduce blowdowns, you can always use 12 estimate emissions reductions associated with 13 that choice of mitigation and then report that 14 as one of the bullet points. I think having 15 that mitigation target is going to be 16 important, and then having it reported because 17 want to be improving the data that's we 18 available to us on emissions reductions from 19 blowdowns and other events.

20 And so that systemwide emissions 21 reductions target is going to help provide the 22 flexibility to operators on what methods they

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1	choose but also give an assurance of emissions
2	reductions associated with this section.
3	MR. DANNER: All right, thank you.
4	Diane, then Alex, then Brian, then Chad.
5	MS. BURMAN: Hi. So, thank you. I
6	think this was a good conversation. I look at
7	this really as what are the principles that
8	we're trying to get out here.
9	And so for bullet one, it seems like
10	to me, the, we all are agreeing, perhaps, that
11	we could apply this section for any intentional
12	release of gas that would exceed some level of
13	mmcf for non-emergency blowdowns. And so the
14	question becomes where did folks get why are
15	they focused on 1 mmcf versus others.
16	And so if we can look at this as
17	and I just want to do bullet one first. I just
18	want to get some sort of clarification on how
19	did we come up with, or how did folks come up
20	with that 1, and is there a way for us to get
21	to a principle that we all agree with, perhaps
22	why 1 mmcf is identified. And that may address

your concerns. Thanks.

2	MR. DANNER: So if I may. Just
3	trying to suss this out a little bit. What I'm
4	hearing is that we don't necessarily need to
5	put a number out there, that we would want to
6	have PHMSA basically set a volume level, and do
7	so for each of transmission, gathering lines,
8	and distribution separately based on data.
9	MS. BURMAN: Well, I guess for me
10	before we sort of take away that 1 mmcf, I
11	understood it as getting to the 1 mmcf really
12	was I think it's because it's a way to
13	differentiate, you know, significant work on a
14	pipeline or a main, or a gate station, from
15	smaller maintenance work.
16	So if we can understand that sort of
17	rationale, that may then help with why looking
18	at it for 1 mmcf, because it's related to
19	trying to differentiate between that. And that
20	sort of rationale may be able to be folded in,
21	in a way that's helpful.
22	MR. DANNER: Okay. Sorry, Alex,

Andy is making body language that says he needs to speak first.

MR. DRAKE: Just in the interest of timing. Not to preempt anybody else, but Andy Drake with Enbridge. Great question.

So we tried to recognize that this 6 7 might be different in different sectors, you 8 know, but for transmission, what we were 9 differentiate looking at was trying to 10 significant work. So we're trying to avoid 11 having to pull down if a pig trap was vented. well, 12 That's not going to meet that it _ _ 13 shouldn't be -- it should be under a million. 14 little, and certainly Arvind's So it was а 15 thoughts about PERITO (phonetic) proposition 16 came into play here, too.

17 But we were trying very quickly to 18 differentiate things that would happen inside 19 the station. Small maintenance work activities 20 big valve sections of pipelines coming from 21 down large diameters. So that's where we 22 pulled this up from, was for transmission just

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differentiating those big pieces of work from small maintenance types of work.

3 MS. BURMAN: Right. And so I think 4 that that section to me is helpful because I 5 think that we all can be -- we are all probably the for the 6 agreement in need on 7 differentiation. And if there's so language 8 that we can get to, and it doesn't have to be 9 right now, on bullet one, that will pull that 10 out and not have us at loggerheads. Because I 11 think we're all in agreement with that, sort of 12 the purposes and the rationale and what that 13 looks like.

14 And so an understanding and getting 15 back to the attorneys here, needing to 16 understand the rationale in where we're getting 17 to so that it can be helpful for what gets 18 flushed out ultimately. And I really, really 19 look to Sara and Erin because I think it's 20 significantly important to the two of you. 21 MR. DANNER: Okay. I'm sorry, Alex. 22 Alan is stepping.

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1 MR. I just had MAYBERRY: а 2 clarifying question or comment. I believe 192.770, which is 3 we're dealing with а 4 transmission section. So I think that helps 5 refine. And also some gathering Type A. 6 MR. DANNER: Type A. 7 MR. MAYBERRY: Yeah, Type Α gathering. So I think that will help isolate 8 9 the conversation on this one. 10 MS. BURMAN: Look at you 11 understanding all the rules there. 12 (Laughter.) 13 MR. DRAKE: Glad he's here. All 14 right. 15 MS. BURMAN: So with that, I think I 16 wonder if we're okay and I think we are. 17 Perhaps we'll come back to it if we're not. 18 But bullet two I want get to. 19 Т little concerned with am а 20 exceptions if there would be a delay, or would 21 result. Because for me, there are times when 22 it's reasonable that it could be, could be a

delay or could result in a safety risk or significant impact if you, if you do X, Y, or Z, or you don't do.

4 So I would hate to see it, because 5 to me it seems very prescriptive in terms of only if there would be, or would result. 6 And 7 so there has to has to be some reasonableness 8 in determining, you know, hey, we can't do this 9 because of this may result in that. And I don't want to water it down, but I do want to 10 11 not set us up for somehow having to prove the 12 thing that you avoided, if that makes sense. 13 Yeah, I mean I think MR. DANNER: 14 we'd have to wordsmith that because I think 15 could would lead to a pretty big loophole. So 16 I would just ask you to be cognizant of that. 17 Alex? 18 MS. BURMAN: Oh yeah, hold on, I'm 19 not done. Sorry. 20 MR. DANNER: Oh, oh, sorry. I was trying to go --21 MS. BURMAN: 22 (Simultaneous speaking.)

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1	MR. DANNER: Sorry, Alex.
2	MS. BURMAN: Yes, so
3	MR. DANNER: Alex, just come back
4	after lunch.
5	MS. BURMAN: So then bullet three.
6	So I look at this as from my perspective, again
7	I'm getting to what's the principles that we're
8	trying to all agree with. And so for me, the
9	principle is that generally operators should be
10	encouraged to look to limit using flaring when
11	the other options are impractical or unsafe, if
12	feasible, and maybe somehow grapple with the
13	fact that we're trying to provide some
14	flexibility in there, understanding that we all
15	probably see it a little differently about the
16	use of flaring.
17	But giving some general principles
18	that we're trying to encourage folks as, as
19	feasible and as appropriate. And I don't know,
20	you know, if there's some wordsmithing that we
21	could get to.
22	And then bullet four, and just I'm

1 fine with reporting. I just always am very 2 concerned about not getting folks bogged down 3 by unnecessary reporting that takes them away 4 from the crucial work. And that's it, sorry. MR. DANNER: All right, thank you. 5 And with regard to your comments on number 6 7 three, I would just opine again that be very 8 careful that you don't create a very broad 9 loophole, because you can encourage flaring. 10 And if people aren't encouraged, they will 11 flare. So, just a concern. 12 Alex? 13 MR. DEWAR: Yes, three points on 14 this. I think one, just picking up on this 15 discussion of thresholds here. I really want 16 emphasize the point around regulatory to 17 harmonization in a lot of this. And if we can 18 stay internally consistent throughout this 19 especially with the incident about reporting 20 aspect of this, I think that will be enormously 21 helpful for operators to have a clear set, a 22 clear threshold standard on that.

1	Erin, as you've raised, the 1 mmcf
2	is consistent with that, would encourage us to
3	try to remain aligned throughout on that.
4	And I think with that, I question
5	the need for point four here, if that is
6	actually picked up in the incident reporting
7	aspect of the rule as well, whether we're
8	creating multiple sort of tiers of reporting in
9	this, separate from what else, what else is in
10	it. That's point one.
11	Point two, really just wanted to
12	emphasize what others have been saying around
13	whether it's setting a, you know, holistic
14	target on this, or just bringing in language
15	about the evolving understanding and
16	availability of data on this.
17	I think important to recognize we
18	are very early days in the industry of actually
19	understanding the extent of emissions, and
20	operators respond to that. Chad, you raised
21	that comment earlier.
22	And so whatever threshold is chosen

1 today is to some degree arbitrary because we 2 just don't, frankly don't have the data 3 overall. We have some intuition, some 4 individual data points. But with the data that will become available through this rule 5 and 6 through others over time, we can make a much 7 informed assessment of what more those 8 thresholds should be in the future, and how 9 they should be differentiated. Ι think So 10 important to recognize in the language, that, 11 that point, as well. 12 And then third, on the flaring 13 point, fully supportive of, you know, ensuring 14 that flaring is, is sort of a last resort and 15 other options are exhausted. But I think the -16 - limiting it, or including the language about limiting it may actually have unintended 17

18 consequences in part because other options may 19 actually be more greenhouse gas emissions 20 intensive overall than flaring in some 21 instances.

So I think it's worth while

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1 recognizing measures like recompression if 2 you're using gas reciprocating engines, that 3 can have methane slip as well to it. And so 4 important to sort of have enough of that 5 flexibility while, of course, encouraging other actions before flaring is the last resort. 6 Thank you. 7

8 MR. DANNER: All right, thank you.9 Alan, you want to step in?

MAYBERRY: 10 MR. Just wanted to 11 address your comment or question related to 12 reporting. Typically in a rulemaking process 13 there's, it's really a two-step process. We 14 have the rule, we develop the policy.

There's also a reporting loop that comes in after that where we, that's also controlled by OMB where we post for comment proposed reporting requirements for new rules. I expect that this type of reporting

would be covered by, say, an annual report.
And it would be subject to review by us, and
then we would follow up, or our state partner

1 would follow up in an inspection that would 2 also, you know, look at how the system and how 3 it was justified, and that sort of thing. But 4 there's a whole separate process for developing 5 the actual reporting requirement. All right, thank you. 6 MR. DANNER: and Erin in 7 Brian, Chad, Sara, Peter, that 8 order. So, Chad? Thanks, Chad Zamarin. 9 MR. ZAMARIN: 10 First, I wonder if, because I think this is 11 going to come up a lot. I do think we need to 12 be careful about creating a lot of additional 13 reporting where it's not necessarily needed, or 14 there are other parts of the code. I wonder if 15 you could just say that it needs to be а 16 documented, you know, a circumstance that 17 exception would be where there's a documented 18 safety risk, or a significant impact to 19 customers. 20 Aqain, have to document we 21 decisions, and then PHMSA inspects and audits 22 those decisions. And that's how we figure out

whether or not we made the right judgment in a code where we're never going to be able to prescribe every single factor, and how we did or didn't make a decision.

5 And there's a lot still to be learned in this, in this area. Significant 6 7 impact to customers, that's going to be 8 something that we're going to have to make 9 judgments on. And then, you know, we're going 10 to try to make the best, most prudent judgment. 11 If you're going to lose five homes for three more days by doing a pulldown, 12 is that 13 significant, or is 1,000 homes?

We're not going to be able to figure that out around this table. That's going to be learned over time. And I think we need to document those decisions. PHMSA needs to come in and audit those, and over time I think we'll get it right through that process. That's how the code works virtually everywhere else.

21 And then on the could versus would,22 I do think that's an area where the idea I

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1	think, again, of a loophole. The whole code is
2	set up like I just described such that we have
3	to make decisions, and those decisions are then
4	validated, audited, and if not made correctly,
5	are enforced upon. And so I don't worry about
6	that. I do worry about the unintended
7	consequences, as was discussed about, you know,
8	you have to prove something that doesn't, that
9	didn't happen.
10	Like, that's a very difficult
11	challenge, but the idea of recognizing that if
12	you do have impacts to customers, you have to
13	document it. You have to support it. And then
14	ultimately, that has to stand the test of audit
15	and inspection, I think is the right way that
16	the code should, should function.
17	And then the last one, I still,
18	like, I'm having a really hard time on this
19	flaring discussion. I think the idea of
20	picking winners and losers from a technology
21	perspective is a bad idea. I worry, listening
22	to the comments, that it's like, you know, a

1 bad word that people have gotten fixated on 2 because of flaring in the Permian. 3 Like, I don't know what, you know, like you could in the way this 4 aqain, is written, you could choose a methodology that 5 would reduce methane emissions by 50 percent. 6 7 And your alternative is to use a flare that 8 would cut those emissions by 10 times. Like, 9 we should not be picking technology winners and 10 losers; we should be focused on getting the 11 best solution implemented for the situation at 12 hand.

13 And so Ι would strongly just 14 encourage us to think about we're establishing 15 a set of guidelines that are driving us towards 16 trying to get the greatest emissions reduction 17 possible during a blowdown. And if a flare is 18 the best way to do that, we should not exclude 19 it or drive operators to use other tools that 20 may not have as great an impact. And so I just 21 worry we're going to have some serious 22 unintended consequences.

1	Thank you.
2	MR. DANNER: Thank you. Brian?
3	MR. WEISKER: Just a couple items.
4	One, on the fourth bullet I struggle with
5	because it's reporting an emission that never
б	happened, right. I mean, that's what, I think
7	that as written it would be operators would
8	report reductions in release volume for each
9	blowdown.
10	So it's a emission that never
11	happened. So, and I support if we have to do
12	reporting it, that we would change that to be
13	documenting.
14	And then I'm proposing a fifth item
15	that we would include. It's part of the
16	language as proposed in 770 around operators
17	documenting the methodology used in paragraph
18	(a), which is where we reference the need for
19	the blowdown.
20	In describing how the methodology
21	minimized the release, I propose that we would
22	strike that requirement to document the

methodology used and the methodologies, how it minimized the release.

3 MR. DANNER: All right, Sara? 4 MS. GOSMAN: All right, first SO apologies for bringing in the other systems in 5 6 number one there. Ι think looking Ι was 7 forward because I think we are interested in 8 applying these provisions to gathering and then distribution. But I understand that that's a 9 10 separate conversation. 11 I would feel a lot more comfortable with deferring to PHMSA on 12 that, on that 13 I don't think, you know, if we are minimum. 14 going to go with a minimum, I think we should 15 So it has 500 mcf in their match EPA's. 16 subpart W proposal. It seems to me to make 17 sense to go with that minimum.

18 Otherwise, Ι think rather than 19 fighting about numbers, we could say to PHMSA 20 we would like you to consider having this minimum, and we defer to 21 you on, that on 22 number.

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1 In terms of flaring, I think, you 2 know, a couple concerns, Chad, that I have. Ι 3 quess one is, you know, I think that incomplete 4 combustion is an issue with flaring. And so 5 just in terms of what the result is, we have a little more uncertainty about sort of what the 6 7 climate impact is going to be.

8 So, you know, I think one way to 9 handle your concern is to say like, you know, 10 operators are limited to using flaring when 11 other options are impractical or unsafe. Or, right, or would result in less impact to the 12 13 climate, right. Some language like that, that 14 gets us at that issue that actually flaring 15 would ultimately result in the outcome that we 16 want here, which is less impact to the climate.

17 And then on the final piece there, 18 you know, I think reporting here, Ι think 19 question about the threshold. there's а Ι 20 think I want to put in 500 mcf as our threshold 21 so, to avoid sort of those small ones. But 22 then I think the reporting requirement is also

for the public and researchers, right, not just for the internal enforcement consideration of what operators are doing, but because this helps us understand whether this particular regulatory measure is working.

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And I think in addition to just that 6 7 release volume, you know, which is of course 8 already in the proposed rule although I am 9 suggesting a change to that minimum, but I also 10 think things like, you know, average operating 11 pressure of the line, mitigation method, right, 12 basically the reporting requirements that help 13 to understand whether this particular us 14 provision is working.

15 So I would add that so unmitigated 16 release volume, including average operating 17 pressure of the line, actual release volume, 18 method and mitigation to that reporting 19 requirement.

20 So, I admit I'm adding more to the 21 reporting requirement rather than less, but I 22 think this is important data that the public

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and PHMSA needs to know.

2	MR. DANNER: All right, Alan?
3	MR. MAYBERRY: I just wanted to make
4	a comment for the committee to consider or keep
5	in mind. Part of Section 114 of the PIPES Act
6	included a report requirement for us to develop
7	with recommendations, and that was asked about
8	earlier by Ben Kochman from INGAA.
9	And just keep in mind that, you
10	know, that would be another bite at the apple,
11	so to speak. That'll be and there's a
12	requirement too, to go to rulemaking to address
13	any, you know, recommendations that came out of
14	that study.
15	So, there will be another, you know,
16	as we learn more, and that's a lot of what you
17	do when you collect data is, you know, you get
18	a feel for what's out there, the experience.
19	So there will be an opportunity after that
20	report comes out, finalized hopefully later in
21	2024, and so we'll have another opportunity to
22	address this as well.

1	MR. DANNER: All right, thank you.
2	Robert Ross, did you need to step in?
3	MR. ROSS: Please. I was just going
4	to make another lawyerly observation. Insofar
5	as, you know, there are certain elements of the
6	recommendation for consideration by the
7	committee that are broad in scope of
8	application. For example, if we look at the
9	first bullet, which characterizes the
10	application of the exception, or the threshold
11	requirement to the section as a whole, i.e.,
12	the entirety of 192.770.
13	One thing for the committee to
14	consider as they're voting or deliberating
15	about it, is whether there are certain
16	exceptions that are, or thresholds that should
17	be applicable to some elements of 192.770 as
18	proposed, or the entirety. So that's for the
19	committee to decide, not for PHMSA. But I just
20	want to make sure that you're sensitive to that
21	nuance.
22	MR. DANNER: All right, thank you

for that. Peter?

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2 MR. CHASE: Yeah, thank you for 3 clarifying we're talking specifically about 4 changes to 192.770.

5 first bullet point, For the Т do think there should be some sort of de minimis 6 7 exception because think the way this Ι is 8 written right now, every time, as you 9 mentioned, every time you launch a pig or check 10 a relief valve, these requirements could apply.

11 Maybe it's adequate to exempt de minimis 12 releases; don't know. Better legal 13 minds than mine will have to figure that one 14 But I think there, I do, I think I'm out. 15 convinced of the need for some kind of a floor.

Number two, honestly, I'm not really sure how that's different from the current language in 770(b) regarding exceptions by implementing an emergency response plan.

20 Number three, flaring, the flaring 21 discussion. I mean, I think the instructions 22 we see from Congress, right, were to minimize

1 methane emissions, and flaring does that. 2 the instructions we received from Based on 3 Congress, I quite frankly don't understand the rationale for limiting its use. 4 5 For four, well, I had some comments on release volume reporting, but, Alan, I think 6 7 you've answered those for me. I guess that's 8 all I have. Thank you. 9 MR. DANNER: All right, thank you. 10 Erin? 11 MS. MURPHY: Thanks. Erin Murphy with EDF. So I just wanted to sort of circle 12 13 points that Arvind back to and others made 14 which is the idea of earlier, an overall 15 systemwide emissions reduction target. 16 And wanted to that I'm say 17 supportive of that and think, you know, it 18 could be really effective for this sector of 19 the industry. But it feels like a lot to sort 20 of add into a rulemaking that's already 21 underway. 22 Andy mentioned earlier Ι know the

1 idea of, you know, recommending, the committee 2 recommending that PHMSA undertake a study on 3 that point. And I think, you know, there's 4 been some discussion about reporting, and it 5 feels to me like even before recommending that PHMSA, you know, study that further, there's 6 7 this baseline need for more information about going and what 8 how blowdown mitigations are 9 operators are able to achieve. 10 And so I think the way the NPRM is 11 structured makes a lot of sense to me in this 12 early which is giving stage, operators 13 flexibility to choose between а number of 14 methods. But I do think that reporting is 15 really important here so that PHMSA, the public, and, you know, industry, can sort of 16 17 see how this is going in terms of which 18 mitigation options are operator selecting, what 19 mitigation is being achieved by those different options and the combinations of those different 20 21 options, and just kind of getting that more 22 documented.

1	So I'm supportive. I don't know if
2	it got, made it onto the screen, but Sara
3	mentioned a number of reporting requirements.
4	And I just wanted to raise up some language
5	that was in comments filed by the joint
6	environmental commenters, which is that
7	operators should be required to document and
8	report which practices were used, the estimated
9	mitigation achieved by each practice, and the
10	quantification of gas released with mitigation.
11	I think there's probably some even
12	more technical items that might also be helpful
13	to sort of better understand the circumstances
14	around different blowdowns, and be able to draw
15	out and think about trends across the industry,
16	such as the average pipeline pressure over,
17	like, the last month or some amount of time
18	before the blowdown, and then the pressure at
19	the time of the blowdown. Just trying to get
20	closer to that ability to estimate the
21	mitigation that was achieved, and what the full
22	extent of the blowdown might have been without

mitigation.

2	So I definitely am not comfortable,
3	I don't think, with item five about the
4	striking the language for documenting the
5	methodology for choosing the mitigation method.
6	That feels really important.
7	And then want to just emphasize the
8	idea of adding in some, some useful reporting
9	in part so that PHMSA and others can evaluate
10	in the future the idea of an overall systemwide
11	emissions reduction target.
12	MR. DANNER: All right, thank you.
13	Arvind?
14	MR. RAVIKUMAR: Thanks. So, maybe
15	two proposals for consideration. If you look
16	at nominal emissions reductions assuming
17	flaring works as expected, and if you flare a
18	volume of gas that would otherwise be vented,
19	that corresponds to about an 85 percent
20	reduction in greenhouse gas emissions.
21	For other methods of mitigation, the
22	number could be different. So for bullet point

1 three that says limited to flaring when other 2 options are impractical or unsafe, perhaps one 3 option there is to say require demonstrated 4 methods that mitigate emissions by at least 50 5 any specific method, but percent. So not whatever method is chosen, there has to be a 6 7 demonstration that it mitigates emissions by at 8 least 50 percent, or some number. And flaring 9 could be one of those because it does at 85 10 percent or so.

11 The second point I want to make is 12 on the fourth one, reporting requirements, I 13 think just a modification to address some of 14 the concerns that we heard here. Reporting 15 quantification of gas released with whatever 16 mitigation has been undertaken. So report 17 emissions volumes, which actual could be 18 incident through a direct measurement or 19 calculation, as opposed to estimating what the 20 potential reductions were.

21 MR. DANNER: All right, thank you 22 very much. Andy?

1	MR. DRAKE: Andy Drake, with
2	Enbridge. I just want to make a couple points.
3	First of all, Erin, I agree with you. We're in
4	vertical learning here. We need to respect
5	that, and I think gathering the data to help us
6	make informed decisions for the next steps is
7	really important.
8	So we should balance that between
9	gathering extraordinary amounts of information,
10	but we should be very intentional to gather the
11	information that's happening in this next
12	couple years as we move into this.
13	I had a question for, really for
14	Sara. And that was the discussion about the
15	threshold. We have on the board 1 million and
16	you were citing 500. And I want to make sure
17	I'm, it's not 500,000.
18	Because EPA is really about
19	reporting requirements. This is about an
20	action effort. And so if we're going to talk
21	about 500, 500 is very small. Very, very, very
22	small. That would be everything that we do in

1	a station. Every maintenance activity would
2	meet that criteria.
3	So I just want to make sure we're on
4	the right criteria here. Is it, you know, is
5	it 500 or .5? But I think those are big deals.
б	Because at 500 we report everything we do.
7	Everything that happened would be reporting, or
8	minimizing the blowdown.
9	MR. DANNER: All right, thank you.
10	Chad?
11	MR. ZAMARIN: Thanks, Chad Zamarin.
12	Yeah, I do think maybe adding to three based on
13	what Arvind and Sara had said, something, I
14	don't know if we need to be specific to a
15	percentage, or just say that limited using
16	flaring when other options are impractical or
17	unsafe, or provide less benefit from emissions
18	reduction perspective. Or if there is some
19	threshold.
20	But I think qualifying that, it
21	sounds like there's support for. If that's
22	your best tool for reducing emissions the most,

then you know, it should be available. So I don't know if you can add something to the end of three there.

4 agree with Andy. And, yes, I Ι to reiterate when 5 think it's important we compare things like EPA reporting thresholds to 6 7 what this is, which is an action threshold. 8 Like, this requires us to go out and spend --9 literally this is going to cost, this -- and 10 we're already doing this as an industry. Ι 11 want to make it clear.

12 But this is significant investment 13 sending recompression equipment in out to 14 installing new equipment at sites, blowdown 15 we're modifying pipeline facilities. And 16 installations. I mean, this is costing and 17 will cost -- this will be one of the most 18 expensive portions of the rule. Ι think 19 industry has said this makes a lot of sense. 20 We're already doing a lot of this, and trying, 21 getting started on doing this.

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But this is an action threshold, not

1 a reporting threshold. So, I do think it needs 2 to be some level that captures, again, the, 3 we're focused on eating the elephant kind of 4 one bite at a time, but let's take the biggest 5 bites for the benefit possible to begin with. chasing 6 And, know, small equipment you 7 evacuations around compressor stations, 8 wouldn't make a lot of sense. Thanks. MR. DANNER: All right, thank you. 9 10 Sara? 11 MS. GOSMAN: Yes, so I did suggest a 12 very low threshold here, and, you know, we're 13 starting from a place where all of this would 14 regulated. So from actually be that 15 perspective I'm moving on. But I agree, it's a 16 low threshold, and to me, this conversation 17 tell -- is an indicator that we should defer to 18 PHMSA, the sort of expert agency, the on 19 appropriate threshold. mean, there are 20 qoinq Ι to be 21 different interests here in terms of how broad 22 this regulatory requirement to, want we you

know, the applicability of it.

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2	I think our job is to say you know
3	what, there is, there needs to be a de minimis
4	threshold here. And rather than tell PHMSA
5	these are the folks you can regulate and these
6	are the folks you can't, I feel like that's
7	unless we are all in agreement on that number,
8	and I just don't think we are, I don't think
9	it's a good idea to have it in our
10	recommendations.
11	MR. DANNER: And just to clarify,
12	are we talking about flaring or are we talking
13	about number one?
14	MS. GOSMAN: Sorry, that was number
15	one.
16	MR. DANNER: Okay.
17	MS. GOSMAN: Was the conversation I
18	thought we were having.
19	MR. DANNER: Yes, that's, I just
20	wanted some clarity on that. Chad?
21	MR. ZAMARIN: Yeah, and on that
22	point, I don't think we disagree conceptually.

1 Т think we probably do disagree with the 2 threshold. Because I think we do, de minimis is 3 a pretty, you know, again it can be defined differently by different people. 4 5 And what I'm advocating for and I think makes the most sense as an initial focus 6 7 area is -- and we've seen the data. I mean, 8 the most significant contributor of methane 9 emissions in the transmission space, which is 10 where this applies, is large blowdowns of 11 pipeline segments. 12 And that's, I truly believe that is 13 the intent of this section, and should be the 14 intent of this section. And frankly, when we get beyond that, it becomes impracticable. 15 Ιt becomes the cost benefit doesn't work. 16 17 And we're still figuring out, and I 18 we're going to talk more about think those 19 during leak detection and reporting. We've got work to do to find those smaller 20 lot of а 21 releases. Frankly, they're not blowdowns. 22 So I just -- I think it's good and

1 fine if PHMSA looks at it and sets that 2 threshold. But hopefully we can all agree on 3 what the threshold is trying to accomplish. MR. DANNER: And I just want to say 4 5 I agree that we could put some more instruction in number one. Just basically, PHMSA should 6 7 establish a minimum volume for non-emergency 8 blowdowns that excludes non-significant, or, I 9 choose your adjective and mean, choose it 10 carefully. But just basically, you know, instruct PHMSA what it is we are trying to 11 12 achieve here. 13 Diane? 14 So I think that gets MS. BURMAN: 15 to, I'm going to actually ask Robert, because 16 they do need us to establish the rationale. 17 And so making sure that for bullet one, we are 18 kind of hitting the mark in terms of what they 19 need from a rationale perspective. 20 MR. ROSS: And, thank you, 21 Commissioner. I think that it's, you know, 22 we've in the back and forth, you know, like

we've certainly got a couple of, you know, like things that we can point to, for example, similitude with, you know, like the proposed reporting standards over in part 191 for large volume releases.

There are other, you know, like kind of bases for the one -- for whatever threshold is established, that's helpful, too.

Also as well, like insofar as if as 9 10 the committee makes а recommendation and it 11 feels comfortable doing so, if it could also be 12 clear on, you know, if there are different, 13 say, for example, if the recommendation should 14 apply to all the different species of pipeline. 15 You know, like to which this provision would 16 otherwise apply. Say, for example, is the de 17 minimis threshold -- you know, like, cost 18 effect and all that for transmission lines, but 19 maybe not for that subset of gathering lines 20 that would be subject to it, that would be 21 quite helpful for us. Thanks.

MR. DANNER: Okay, and so 770 is

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1 mostly transmission and some gathering. So if 2 we're going to talk about 770, I would just 3 include all pipelines covered by 770. Okay, Erin? 4 Erin Murphy with EDF. 5 MS. MURPHY: I just am looking at my notes. I wanted to 6 7 circle back to one just discussion from earlier 8 on flaring. 9 You know, I feel like we're, we've 10 heard a lot today and there's a lot of comments 11 in the record from industry about how some of these technologies and blowdown mitigation 12 13 practices are newer, and that industry is, you 14 know, using them and developing comfort with 15 I do want to acknowledge that are -them. 16 there are, you know, industry leaders that have 17 been implementing these technologies for years 18 now. 19 But I just worry that, you know, the 20 idea that flaring, you know, needs to be sort 21 of on an equal footing because it's such a 22 practical solution sort of falls back to this

place where there's more comfort with flaring as a practice. There's more familiarity with it.

But because the objective here is to 4 5 not only mitigate methane emissions, but also, mitigate 6 know, waste, right, reduce you 7 economic waste, to the extent there are these 8 technologies that enable the qas to not be 9 vented or combusted, making sure that those are 10 prioritized and really picked up and, you know, 11 put to use and explored by operators to really 12 sort of figure out their maximum effectiveness, 13 drive that, you know, technology development 14 forward, is just, to me, another reason why the 15 idea that having operators start with the 16 evaluation and use of those technologies before 17 resorting to flaring is important an recommendation, I think, and worthwhile for the 18 19 committee to keep in there.

I also just want to talk about the numeric threshold, which now maybe the numeric threshold has been taken out of number one.

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1 But this discussion of, you know, the 1 mmcf in 2 another part of the NPRM is reporting. And I want to, again, reiterate that, you know, EDF 3 many 4 and other commenters have strongly 5 recommended that PHMSA reduce that large volume release reporting requirement to 0.5 mmcf. 6 7 think Because we that, you know, 8 half a million mcf is relevant, is a large 9 release, and should be documented and reported 10 and known to the public. But recognize the 11 point others have made that, you know, that 12 discussion about reporting might be different 13 from sort of, you know, an action threshold. 14 And I think for me, that just brings 15 back to what makes most sense for this me 16 committee is to recommend to PHMSA, that PHMSA 17 evaluate and establish, appropriate, as а minimum threshold for blowdown mitigation. 18 19 All right, thank you. MR. DANNER: Arvind? 20 21 MR. RAVIKUMAR: Just point of а 22 clarification on of Chad's one and perhaps

1	Andy's comment, as well. We have done a lot of
2	measurements of blowdowns at compressor
3	stations, and correct me if I'm wrong here.
4	Anything that's anything that happens in the
5	station in terms of blowdown emission is far
6	less than even a .1 mmcf.
7	So, you know, this discussion over
8	.5 or 1 mmcf as a threshold, is less relevant
9	because if it's less than 100 if it's
10	anything more than 100,000 mcf or .1 mmcf, it
11	will exclude everything that happens on the
12	station itself.
13	It's only sort of pipe segment
14	blowdowns that will even achieve this threshold
15	of .1 or .2 mmcf. I just wanted to make sure
16	that that's in the discussion as well.
17	MR. DANNER: All right, thank you.
18	Diane?
19	MS. BURMAN: So I am, I like that
20	we're changing the language in bullet one. My
21	only concern is moving away from the actual
22	numeric number. Because we originally started

out with the numeric number, and didn't explain the rationale for what -- where that number came from and why.

And so I feel like in some ways, we're kind of making it now a little bit more confusing. So we're trying to get at here that we're differentiating between the significant work versus smaller, routine maintenance.

9 And so in some ways, shouldn't we 10 have some type of backstop in terms of the 11 number that's already here. Because if we 12 can't identify that, then how's PHMSA's going 13 to be able to do that?

14 And so it's like, and maybe it's 15 just I don't like loss of control here, but I 16 just want to make sure that we look carefully 17 at what we're saying. And if we are all in 18 to differentiate agreement, that it is the 19 larger work versus the smaller, is there not 20 some understanding of what that number is? 21 That we can at least be clearer so 22 that it's not just pick a number that, you

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1 know, maybe even be different from, you know, 2 where industry is versus others. And I just 3 wonder if there's any thought on that. I just 4 get concerned. 5 ГГІТ MR. DANNER: So share my thoughts, which is I don't think we've reached 6 7 what number would be consensus on а that's 8 agreeable to the committee. 9 Ι think what we could add So to 10 number one is that, you know, this delineation 11 should be based on data. And I think Arvind 12 has made clear that that data is available. 13 But I just don't think we can land on a number 14 because I don't think we have consensus here. 15 Okay, I've got Brian, and then Andy, 16 and Chad. Well, 17 I'm kind MR. WEISKER: of 18 going back to what Diane just said. But, I 19 mean, in the rule, or in the proposed rule is a million cubic feet for a 20 1 large volume 21 release. So I think there's some justification 22 that 1 million number that we've for been

talking about.

2	And so I agree with what you're
3	saying, Diane. I think we have to propose a
4	number. I'm not sure that we're going to get
5	consensus, but I just, as written, it just, I
б	don't know that I it doesn't feel like you
7	can support it. It's just, it's pretty vague.
8	MR. DANNER: Yeah, okay. I just,
9	again, my position is I don't think we're going
10	to reach a number. And I think as long as we
11	give clear direction that this is supposed to
12	be based on data, and distinguishes between
13	smaller releases from routine maintenance from
14	others that are more significant, might be the
15	best we can get here.
16	I'm sorry, so I think Andy, and then
17	Chad.
18	MR. DRAKE: This is Andy Drake, with
19	Enbridge. I appreciate Commissioner Burman's
20	point. I think we need some clarity here. I
21	think the thing that may help us is harking
22	back 20 years ago to a discussion about

integrity management.

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2	Well, we should deploy integrity
3	management everywhere. They said well, that's
4	not practical. So we decided where would we
5	get the biggest bang for the buck. We decided
б	we'd deploy it in HCAs. Then we would
7	iteratively step it up to MCAs. Then we'd
8	iteratively step it up to LCAs.
9	I think we're just starting here.
10	We are working kind of off our heels a little
11	bit here with an absence of data, but that
12	doesn't mean we have nothing.
13	We have some things to work with
14	here. And we're, I would be very cautious
15	about trying to leave this so vague. I think
16	that's just going to cause a lot of
17	consternation in application, which is not
18	helpful to anybody.
19	Even if we just pick a number that
20	it generally represents what we think a valve
21	section blowdown looks like on large-diameter
22	transmission pipe, which is what this is about,

and quantify that. And I think to Arvind's point, those numbers are not unobtainium. We can box that, and start, and gather data, to your point, Erin, and then make another choice if we need to tighten it up, or where we need to make adjustments.

7 But I think we're, I just encourage 8 us not to look so binary like, at this. Like, 9 it's a one and done and we're never going to 10 visit this again. I think we're right at the 11 front of getting data to make a better choice. 12 I think a number in the -- certainly above .1, 13 somewhere in the .5 range would but be 14 reasonable for а valve section of gas 15 transmission pipe.

MR. DANNER: All right. Chad, and then Brian?

18 MR. ZAMARIN: Thanks. Chad Zamarin. 19 Yeah, I agree, and I do think it would be 20 helpful to establish some number. And maybe 21 you can say to be confirmed by PHMSA, but I 22 think it gives more clear guidance. I also

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1 just, I appreciate the challenge we're going to 2 have this week. You mentioned consensus, I'm 3 not sure we're going to get unanimous on 4 everything, so I do think there may be points 5 at which we need to vote on language. And there may be different versions 6 7 that we that we weigh in on, I don't know. But, I do think we need to be able to -- and 8 9 even as I look at this, I'm not sure I could 10 even vote as a single package. And so, I do 11 think we got to think about for the week, how 12 the record on some very clear we get on 13 recommendations, and then kind of move on from 14 there. Thank you. 15 MR. DANNER: All right, thank you. 16 Any other -- yes, Sara? 17 MS. LONGAN: Thank you, Mr. 18 Chairman. Sara Longan, Army Corps of 19 I want to harken back to something Engineers. 20 that Commissioner Diane -- Commissioner Burman 21 said earlier, that I don't know that the 22 discussion has allowed to really honor the

comments followed up by you, Brian, in terms of just looking at what is before us. And that the rationale for the threshold that was provided in the proposed rule is also what the Committee and DOT has before us, based on public comments.

7 Therefore, I think I am supporting 8 at least further fleshing out an understanding. 9 the rationale, further We have we can have discussion to advise DOT, PHMSA on whether that 10 11 rationale is justified or not. But, a number 12 was provided in the proposed rule and I would 13 support moving away from doing something that 14 is more vague than that. Thank you. 15 MR. DANNER: Thank you. Arvind? 16 MR. RAVIKUMAR: Just one quick point

17 on Number Four. I think somebody brought this 18 up earlier, but I would be more comfortable 19 changing that to say reporting emissions for 20 each blowdown, as opposed to reporting a 21 reduction for each blowdown. Because, that's a 22 theoretical calculation, at that point.

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1	MR. DANNER: All right, thank you.
2	Sara?
3	MS. GOSMAN: So, I do think we've
4	reached an early point here, where we have to
5	decide if we're trying to reach for consensus
б	here on these provisions or we are going to go
7	to a vote, and what we care about is the
8	majority. I think there is a middle ground
9	here, which we could certainly reference in
10	this voting slide, the range of figures that
11	the Committee talked about. And indicate that,
12	in fact, there was disagreement among the
13	Committee about which specific threshold number
14	there should be.
15	I think that reflects for the
16	record, as well as for our vote, that we have
17	differences as to the number, but that we agree
18	on the principal, right, which is to have this
19	threshold. And I think agreeing on the
20	principle is important as a Committee, and as a
21	so, as we review these particular
22	provisions, I'd like to see us be able to do

1 unanimously while reflecting that the 2 differences within the vote language. 3 MR. DANNER: Chad? MR. ZAMARIN: Yeah, I just want to 4 5 respond to that, because Ι do think the detail of the principle 6 principle the _ _ 7 I don't think the principle is that matters. 8 we just want to establish a threshold. The 9 principle that we're advocating for is that we 10 establish а threshold that appropriately 11 applies these requirements to large blowdowns, which is what I believe the intent of this 12 13 section is and should be. 14 And so, you know, 500 setting а 15 cubic feet requirement, versus a half-million 16 or million cubic feet requirement -- that is a 17 very different intent. And I think, if that's 18 the proposal that's on the table, I think we 19 need to vote on those and be clear what we 20 think the real intent should be. It may not be 21 unanimous, but I think the intent is more than

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just establishing a threshold.

1 think it's establishing Т _ _ our 2 proposal is to establish a threshold that sets 3 focus on large intentional releases and а 4 doesn't -- I mean, to be honest, we've looked 5 at this, if we go out and we send people in trucks and equipment, chasing 500 cubic feet 6 7 releases in order to -- and run recompression equipment -- we're 8 going to create more 9 emissions in driving trucks to locations than 10 we are in reducing methane emissions. 11 So, we've got to make sure we're 12 focused on the real issue. And on transmission 13 after blowdowns pipelines, it's going of 14 pipeline segments, like, that's the issue we 15 need to be focused on. Thank you. 16 MR. DANNER: And Chad, do you think there's a way of doing that without a number, 17 18 or do you think you need a number to do that? 19 I mean, I think we've MR. ZAMARIN: 20 got -- we've heard pretty strong support for the million cubic feet. I mean, we've heard 21 22 that -- I mean, we know that that will capture

1	large that will capture pipeline blowdowns,
2	we know that it will exclude small compressor
3	station venting activities. And so, I think it
4	makes sense to have a number and like I
5	said, maybe to be validated by PHMSA.
6	Or, at a minimum, we need to be more
7	clear that the threshold will be set such that
8	it will focus on pipeline blowdowns and not on,
9	you know, equipment and compressor station
10	venting activities. One way or another, I
11	think we need to be clear on the intent.
12	MR. DANNER: All right, thank you.
13	Peter, and then Erin?
14	MR. CHACE: Yes. Pete Chace, NAPSR.
15	Real quick. I'll be honest with you, I don't
16	think I understand enough about transmission
17	system operations to know that if you were to
18	ask me to vote on what's the right number a
19	million, half a million, a hundred thousand
20	I don't know. You won't get an intelligent
21	opinion out of me off of that. So, honestly my
22	preference would be to have PHMSA's technical

1 look at it, after they experts take a 2 understand what think the intent we of the 3 regulation ought to be. That's all I have. All right, thank you. 4 MR. DANNER: 5 Erin? Yeah, thanks. 6 MS. MURPHY: I don't want to keep repeating myself, but I am just 7 8 struggling -- there's not a technical analysis know, 9 before us about, you at what point is cost-effective. 10 blowdown mitigation And 11 I'm, you know, trying to rack my brain. And I 12 recollect, you know, looking at documentation 13 of operators mitigating blowdowns that are not, 14 you know, necessarily so large in scale. Like 15 distribution operators that mitigate blowdowns 16 on parts of their systems. 17 And so, that just makes me very, you 18 know, unable to support this, you know, 1mmcf 19 threshold. And really not comfortable with a numeric 20 threshold, it just doesn't feel 21 appropriate to me for the Committee to do that

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when there's not a real technical basis for

taking that position. And, you know, sort of sending this recommendation back to PHMSA to further evaluate, you know, feels more appropriate.

5 I also wanted to jump a little bit -- and this is, like, really digging back to 6 7 earlier in the discussion. But, Peter, Mr. 8 Chace made a comment a while ago, looking at 9 Number Two, the idea that there would be an 10 exception if there would be а delay in 11 emergency response or would result in a safety 12 risk or significant impact to customers.

13 I think I said earlier that I had a 14 lot of concern that that was really open-ended 15 and that at minimum, you know, the idea of 16 documenting and Ι would say not just ___ 17 documenting, but documenting and reporting the 18 reasons is important so, that second _ _ 19 sentence is appreciated. But, Mr. Chace had 20 mentioned, if I am getting it right, that 21 language felt really similar to the exception 22 that's already in the NPRM at 192.770(b) which

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1	requires, you know, an emergency release
2	conducted without mitigation must be
3	documented, including the justification for
4	release without mitigation. And it sort of
5	lays out what constitutes an emergency.
б	And, as I'm looking at the language
7	in Two, it feels to me like, in a lot of ways,
8	is what we're describing an emergency. And
9	does it really need to be a recommendation for
10	an additional exception or is it more about
11	clarifying what constitutes an emergency under,
12	you know, what's already articulated in the
13	NPRM.
14	So, I guess I'm, you know, seeking
15	discussion on the idea of removing Item Two as
16	a Committee recommendation.
17	MR. DANNER: All right. Chad?
18	MR. ZAMARIN: Yeah, I think the
19	challenge with that is it doesn't emergency
20	response plans are typically only initiated for
21	safety purposes, and not for customer
22	reliability purposes. And so, that's the

intent of trying to ensure -- because a lot of what we're seeing with the challenges in those circumstances where you can't -- or, a mitigation would delay an outage, the issue is it would not activate your emergency response plan, but it could put at risk markets and customers.

And so, that was the rationale for making sure we were clear that it's not just avoiding a safety issue that would trigger an emergency response, but also a potential outage or impacts to customers that would be a problem.

14 So, I wonder on that MR. DANNER: 15 if bifurcate one we could it that so 16 exceptions, if there was emergency an as 17 in 770(b), described or if the operator 18 determines that there would be а service 19 disruption or significant impact customers, and 20 then they must document those reasons after 21 they make a determination, so. 22 MR. ZAMARIN: Yeah, I think that was

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1 the goal of what we tried to do. So, they're 2 saying, if it would delay an emergency response 3 -- so it would cause a problem with some form of emergency response. That was I think trying 4 5 to be consistent with the original language. And then, or result safety risk 6 in a or 7 significant impact to customers -- so, I think 8 that was what we were trying to achieve. 9 So again, we got this MR. DANNER: 10 word significant, which is not entirely without 11 some subjectivity. If it's impact to two 12 customers, is that sufficient if it's а 13 significant impact to them, or is it an impact 14 to a significant number of customers? I mean, 15 so, we do have a little fleshing out to do 16 here. 17 Yeah, I think that's MR. ZAMARIN: 18 for the Ι mean, that exists everywhere _ _ 19 code, virtually. throughout the And again, 20 like, I think in a situation like this where 21 you don't even know the variable inputs to the 22 decision-making, it's really hard to prescribe

1 it. So, I do think that puts the onus on the 2 operator to determine significance, and then we 3 will be subject to audit and, you know, 4 enforcement if the right decision-making wasn't 5 made. But, I think at this earlier stage 6 7 really hard to know all the different it's 8 decision-making factors that could go into 9 that. 10 MR. DANNER: All right, thank you. 11 Erin? 12 MS. MURPHY: Yeah, thanks. 13 Appreciate that explanation. Just wanted to 14 directly respond -- I think, you know, based on 15 what's already in the NPRM, it doesn't seem 16 like the Committee needs to make а 17 recommendation for an exception related to 18 emergency response. Because, it's mγ 19 understanding that that's addressed in what's 20 already in 192.770(b). 21 So, talking about what a outage or a 22 reliability impact looks like -- I think I'm

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1 just kind of building on what Chair Danner was 2 saying, that, you know, the significant impact 3 -- the phrasing feels vague. And the idea here is to mitigate blowdown emissions, 4 mitigate, 5 you know, the lost gas and the climate impact of methane emissions as much as possible. 6 And 7 so, I think, you know, making this as clear as 8 possible so that it's not just an inconvenience to a customer, it's a real, you know, outage 9 10 situation that can't be avoided, would be 11 useful. Thank you. 12 MR. DANNER: Chad? 13 I was just going to MR. ZAMARIN: 14 say, I think the record hopefully would support 15 that. We're trying to say significant, meaning 16 that you can't just flippantly say that this 17 would be an inconvenience to your customers. 18 So, I don't think we can solve that definition 19 here today, would be my perspective. But, I 20 would hope that the record, you know, supports 21 that our intent here -- because, it's not

22 reduce emissions at all costs.

1	I mean, there is a cost to the
2	customer, there is the potential impact to the
3	market and to our, you know, utility bills.
4	There's obviously safety concerns that are
5	downstream of the pipeline that we don't
6	control, if you have pilot lights that go out
7	creates significant safety issues. And so, I
8	just think hopefully the record it sounds
9	like there's pretty clear consensus that if
10	there could be negative, significant impacts to
11	customers, that that would be a situation where
12	the benefit is not worth the activity, because
13	you're creating significant potential harm.
14	And so, I don't know that we can
15	better define it, but I feel like there's
16	generally consensus around the concept.
17	MR. DANNER: Yeah, thanks. I did
18	have a question earlier that I asked Andy
19	about, the term significant impact. I mean,
20	are we talking about just a service disruption
21	or are there other significant impacts that are
22	I mean, safety is already called out here,

emergency response is already called out although, I think we could just cite to 770(b). But, what are you thinking about when you say significant impacts? Because, I'm not clear on what that is, if it's not a service disruption. Andy?

7 MR. Andy Drake with DRAKE: 8 Enbridge. I agree with Erin, I think we can 9 take out emergency response out of here. The 10 point really was about this debate between 11 customer interruption and environmental impact, we're trying to figure out how to balance that. 12 13 And keeping it in here is important because 14 that's the crux of the conversation, is it's 15 not a zero sum game, how do you balance out 16 this decision?

And I think what the intent was here was to try to set in place a process that would involve the right people to make an informed decision. And I like where Chad's going -this is going to evolve over time. To try to define that number -- well, it's two houses,

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well that's too many. Well, I don't know, who the heck's in that house? I mean, maybe it's a hospital -- we're not going to put a number up there that makes sense to anybody that's informed.

But, I think the fact that you're 6 7 qoinq through a process to talk to those 8 customers, to talk to the PUCs (phonetic), to 9 informed choice about an make an impact is 10 going to clarify that over time. But, I think 11 the real value here is that you're forcing 12 people have that conversation, to work to 13 through understanding that impact and that 14 trade.

15 think that that's going And Ι to 16 tighten up over time. I don't know that we can 17 I don't know what we tighten it up right away. 18 would do to do that, other than force people to 19 have the conversation, and then, you know, 20 evolve that conversation through enforcement 21 with PHMSA. I really don't, I don't know what 22 else we would do at this point. But, it's not

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1	the end, that's the good news. I mean, that's
2	the start.
3	MR. DANNER: All right. And so, you
4	don't feel that we need to clarify what
5	significant impact means, just leave it as
6	significant impact?
7	MR. DRAKE: I don't know that we
8	need to do that here. I think the record
9	should be back to Diane Burman's comment.
10	This is more about are we touching the key
11	points here? Are we doing the right things to
12	create the right outcome eventually? And that
13	is, are we considering the right things in that
14	decision? And that should be, you know, on the
15	record, this conversation for PHMSA. Not just
16	in the rule-making, but even as they move to
17	enforcement.
18	And for operators, the intent was
19	minimize the blowdowns. It wasn't some check-
20	the-box exercise, it was a genuine effort to

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consider how do we minimize those blowdowns

without creating unacceptable societal impact.

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1	MR. DANNER: All right, thank you.
2	Chad, and then Erin?
3	MR. ZAMARIN: Yeah, I was just going
4	to try to give maybe, like, an example. And I
5	think your question's a good one. But, I think
6	it's really hard, again, to define it at this
7	stage with enough specificity to cover all
8	scenarios.
9	But, you know, we do integrity
10	management activities as we all know,
11	required by the code. And if you ran a tool
12	and you found a certain defect, and you had to
13	make an immediate repair to that defect, and it
14	were in the middle of the winter, you know, you
15	would have to go out to that pipeline, we'd
16	have to blow down the pipeline in order to make
17	the repair. And if you're in the winter, on a
18	multi-line pipeline where you can recompress
19	into another pipeline without impacting service
20	to your customers, that's what we're doing
21	today.
22	I mean, we are identifying those

1 scenarios where we can do that without 2 impacting market. If you're in the middle of 3 Winter Storm Uri and you're on a single 4 pipeline feeding a city or a town, and you 5 don't have the ability to implement that -- or, by implementing it, it would increase, and it 6 7 does, it would increase the duration of the 8 outage many days and could put at risk think 9 that's the kind customers. Ι of 10 differentiation we're trying to identify that 11 we're seeing in real life.

12 Ι those the scenarios mean, are 13 where we're saying this, you know, doesn't 14 check that box of can I do this and not put at 15 risk my customers and the people that live and 16 depend upon the gas that we're trying to serve? 17 And so, that's an example, but there are a lot 18 of different situations I think that are hard 19 to define. Thank you. 20 MR. DANNER: All right, well, thank

21 you for that explanation. Erin? 22 MS. MURPHY: I think I forgot what I

1 was going to say. Listening to what Chad just 2 sort of walked through, I guess I want to make 3 sure that I understand -- and maybe this is 4 like clarification question to PHMSA staff -that, like, a customer outage is not covered 5 under the activation of an emergency plan? 6 7 MR. ZAMARIN: It's not. 8 MS. MURPHY: So, it feels to me 9 like, again, looking at the language of Number 10 Two, safety risk, you know, we've discussed is 11 safety is what the emergency plan is for. So, I don't think the Committee needs -- there's a 12 13 need for the Committee to recommend an 14 additional safety risk exception. This is only 15 about an exception if there's this significant 16 impact to customers. 17 And I mean, I would propose, you 18 know, significant outage risk to customers --19 or, it feels like outage is the primary impact 20 that we're talking about. I also want to make 21 sure, you know, we're zooming out and 22 contemplating blowdown that a means а

suspension of flow on a pipeline for some period of time, while the blowdown takes place -- and that's happening when an operator has to do a planned blowdown. The concern that is being -- in my understanding, the concern that's being discussed is that that might take longer because of the mitigation practices that would have to be implemented.

9 So, I just want to make sure there's 10 a lot of clarity here that this is about the 11 length of time that the suspension might last, 12 and if that time length would be extended 13 implementation of because of mitigation 14 So, it just -- and maybe this isn't practices. 15 helpful because there's no way we're going to 16 get clarity on this, but it's just, from my 17 perspective, like, the current phrasing feels 18 really open-ended. And again, I don't think 19 the safety risk needs to be in there and I 20 think the significant impact to customers could 21 maybe be further clarified.

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MR. DANNER: All right, thank you.

Chad, last word and then we're going to have to take stock.

3 MR. ZAMARIN: Yeah, I'm just trying 4 to give a little more perspective. I think 5 that's the challenge with trying to set prescriptive, like, scenarios here at 6 an 7 initial regulation. idea Ι mean, the that 8 we're going to start requiring these activities on large blowdowns, we're going to report on 9 we're going to start documenting 10 them, the 11 results -- we're going to require that 12 operators have to document and support if they 13 can't use these methods or they would cause 14 risk to customers, I think that's the way you 15 have to start a regulation in this framework. 16 Because -- and to answer your 17 question, yes, the primary issue is any one of 18 these methods could extend the length of an 19 outage, could reduce the pressure on a pipeline

18 these methods could extend the length of an 19 outage, could reduce the pressure on a pipeline 20 that otherwise would be required to serve 21 customers. And so, I think there are a lot of 22 unintended consequences. But again, I think to

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try to be more specific, I'm not sure we can capture every unknown.

3 And so, I think when you say 4 something like significant impact to customers, 5 it. requires an operator to demonstrate that there would have been a significant 6 impact. 7 And like I said, that kind of language exists 8 in many parts of the regulatory framework. And 9 it is debated, but over time I think the record 10 usually supports what the right definition 11 would be. And so, I'm not sure we can do 12 better than that at this stage, but I think 13 it's a significant improvement from where we 14 are today. All 15 MR. DANNER: right. It is

16 12:40, and we've had a very productive morning. 17 little disappointed that we Ι а haven't am 18 finished the entire leak detection rule by now, 19 but I think -- let's take our lunch break and 20 then we will come back. And at that point 21 we'll try and get an assessment of the language 22 that we have up here, what further refinements,

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1 if any, need to be made, and then see if we can 2 get a vote on the ONM and venting. 3 So, with that we will be back at 4 1:45. Thank you. 5 the above-entitled (Whereupon, matter went off the record at 12:40 p.m. and 6 7 resumed at 1:52 p.m.) 8 MR. DANNER: All right, we're going 9 to call this meeting back to order. Hope you 10 had a good lunch. 11 We are now going to talk about the language that we have in front of us. Let me 12 13 call on Andy Drake. 14 Andy, do you want the to set up 15 conversation? 16 MR. DRAKE: Yeah, I appreciate this. 17 with I'm Andy Drake Enbridge. Good 18 lunch, appreciate conversation at so many 19 people, you know, taking some time and helping 20 us kind of frame some things. 21 What we thought we would do is maybe 22 language up here, take each of put those

proposals one at a time. And let's break them
down to principles.

I think Commissioner Burman had a good idea there, and I think that really may help Robert Ross with what is it we're trying to do here and create some -- or tangibility and context to the criteria of the principles we're trying to protect in each one of those bullets.

think we start 10 So Ι if with the 11 first bullet. I don't know where, John, did you get some language there? If you want to 12 13 just flip that up there. Yeah, just throw it 14 up there.

15 I think when we look at what we're 16 really trying to do is really this was intended 17 to address large diameter pipeline blowdowns. 18 intended to address things It was not like station work. It wasn't intended to address 19 20 things like maintenance work on meter stations. 21 It wasn't intended to deal with things like 22 ESDs.

1 So we were trying to give some more 2 criteria in this that would really help define 3 what we're trying to do, what were the principles associated with that first bullet. 4 5 And if we could as a committee agree those principles, then the number 6 is to а 7 product of maybe some more data that can get to 8 in another, in a second iteration here, or some 9 threshold, more tangibility around some it 10 could be a separate secondary conversation. 11 But I think this piece right here is really reflective of that conversation. 12 But I 13 just want to throw that up there maybe as a 14 straw man for folks to comment on. 15 And then we could move into the 16 second bullet, which the second one was really 17 about the intent as to address scenarios that 18 would affect customer outages. But that would 19 be the principle around that second bullet. 20 So let's just maybe start with the 21 first bullet and with that, I'll just kind of 22 open the floor.

1	MR. DANNER: So just to clarify, are
2	would you be looking to replace No. 1 with
3	this, or to throw this onto No. 1?
4	MR. DRAKE: Right now I think we're
5	just sort of suspending a vote on the first,
6	the previous proposal and just making sure this
7	group is all aligned on the principles, which
8	is really the request I think that Commissioner
9	Burman asked prior to break.
10	So we just said, well, these are the
11	principles that we are trying to work to on the
12	first criteria. If we agree to that, then
13	maybe we can have another conversation that
14	might provide more tangible code language.
15	They're a recommendation, not code language, a
16	recommendation to PHMSA. Does that make sense,
17	Commissioner?
18	MR. DANNER: Yeah, it does. Okay,
19	Arvind?
20	MR. RAVIKUMAR: Thanks, Andy. And
21	so I agree with this approach on the principles
22	of what emissions to include and exclude for
this specific criteria. Let me build on top of this.

Just over the lunch, I was looking at all the data that are available on blowdownrelated emissions, and it covers I think one, two, and three for the most part for which we already, we have available data on. So what I'm thinking is we know this.

9 If we agree on this, then we'll look 10 at what are all the emissions that we know of 11 from blowdowns associated with these events, 12 and set a threshold that's way beyond that so 13 that we know for sure the threshold excludes 14 all of these emissions.

15 looking at And just by the data, 16 that threshold is anywhere between .2 and .5 17 And if by mmcf. we take as a threshold, 18 definition that threshold will exclude 19 emissions from all of these categories.

20 MR. DANNER: Any response to that? 21 So one of the things that we did have in the 22 No. 1 that was up on the other screen was a

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reference to data. That's something we want to retain, Andy.

3 MR. DRAKE: This is Andy Drake. Ι 4 think fundamentally, and I appreciate Erin's 5 point. We're at the front of the ship here. We are in an information-gathering place right 6 7 And I think that we want to try to get as now. 8 much information coming into the machine as efficiently as we can to make better choices 9 10 going on.

11 I think it's its own discussion. Ι 12 think there's a reporting section of the 13 regulation -- of this discussion here, No. 6, 14 that we're going to talk about reporting. Ι 15 think the thing that I saw that was important 16 in this specific proposal was that we want to 17 document the reasons why we made the choices we 18 made.

19 That's important. Reporting other 20 things, I would move that to Section Six 21 discussion so that we talk, I think it's really 22 important to have that conversation about data

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1	collection, whether it's documentation or
2	reporting, in one consolidated place so that we
3	know how we're getting all this information.
4	I don't think it serves us well to
5	do it piecemeal. So the piece about reporting
6	that I think is relative to me on this proposal
7	is that we should be able to document the
8	decisions they were why they were made.
9	And that's the documentation piece
10	here. But data collection about how much
11	emissions we're doing, that's later. I'm not
12	saying we don't want to talk about it, I'm just
13	saying it's Section Six, not this section.
14	MR. DANNER: Other thoughts?
15	Commissioner Burman?
16	MS. BURMAN: So thank you for
17	putting this up there. I think it's really
18	helpful because, again, I come back to what are
19	the principles that we all can agree on. And
20	looking at this helps us then make sure that
21	we're all on the same page as we move to the
22	next.

1	And Arvind, I think your comments
2	were very helpful for that next sort of step.
3	I just want to make sure that, you know, as I
4	see it, that this is principles that we can all
5	agree with and you know, make sure that we're
6	not missing something that, you know, or
7	characterizing it differently than it is.
8	But I think it's great, so thanks.
9	MR. DANNER: All right. Sara?
10	MS. GOSMAN: Yeah, so I like these
11	principles. And I also feel the need to
12	clarify again because I don't think I was clear
13	before that actually the number I was
14	suggesting was .5, right, mmcf, just to make
15	sure that everybody understood.
16	So you know, I think Arvind's data
17	is really important to this discussion. I
18	think it's on the record. I like having that
19	on the record. I think this helps us to
20	understand again sort of what we're trying to
21	get at here, and for that reason I like it.
22	I don't think we need a number on

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the record, but if we were to have that, right, I think I'd want to do the range that Arvind mentioned.

And then on reporting, I'm fine with 4 having that discussion later. I will say, you 5 there are specifics related to this 6 know, 7 blowdown mitigation that interested we're in 8 getting, things like the methods used. And so 9 I just don't want to forget that piece when we 10 address that reporting requirement later, 11 because it is very specific I think to this 12 particular provision.

MR. DANNER: So I am not seeing any further cards. I'm hearing that we have a consensus that this language would serve as our first sentence in our recommendations. Is --Erin Murphy?

18 MS. MURPHY: So Ι may just not 19 totally understand the process. We're 20 discussing including this language as part of 21 the committee's recommendations to the agency 22 in addition to the other list of items that

1 we'd previously developed? 2 MR. DANNER: This would be in lieu 3 of the first item on the other sheet, as I understand it. 4 5 Andy Drake? Drake with 6 MR. Andy DRAKE: 7 Enbridge. Right now my intent was just to get 8 us aligned on principles, not actually to come 9 up with recommended language to PHMSA. This is 10 really more for creating a record, frankly, and 11 getting alignment. 12 I think the next step might be, I 13 don't mean to speak for everyone at the table, 14 might be to propose language that we would give 15 to PHMSA on this specifically. So I wouldn't 16 say this supplants the prior one. I think this 17 is just sort of a timeout to get alignment on 18 principles. 19 Okay, but just to be MR. DANNER: 20 clear that when we vote, we're going to be 21 voting on this language, not the first sentence 22 of the other sheet. Is that your intent, Andy?

1	MR. ZAMARIN: This is Chad Zamarin.
2	I think the other there's maybe an intro on
3	the other language that says a threshold should
4	be established and that these are the
5	principles against which a threshold should be
6	established.
7	So I do think there's a little bit
8	of maybe combination of the two, but the idea
9	being that we're not going to I don't know
10	that we're going to solve a number here. We've
11	got some good I think data that Arvind brought
12	on the record.
13	But the idea that a threshold needs
14	to be established that should be consistent
15	with these principles, I think that's what's
16	being proposed.
17	MR. DANNER: Okay, so what we're
18	doing is we're hanging this language onto
19	sentence after this first sentence. Still
20	bullet point one.
21	MR. ZAMARIN: Yeah, it looks like
22	that's been that's been updated. I think

1 that would be I think the proposal on the 2 table. 3 MR. DANNER: Okay. Commissioner 4 Burman, did you? 5 No, I just wanted to MS. BURMAN: sort of echo that. I think that it's really 6 7 important that as we move forward, that the 8 committee to the extent that we are levelsetting what we can agree to as principles and 9 delve into some of these issues. 10 11 There will be thornier issues that we'll have to look to, but to the extent that 12 13 we're trying to establish that we are as a body 14 collaborating together and trying to make sure 15 that we're all on the same page, it's really 16 important that we speak as much as we can with 17 one voice, incorporating everyone's diverse 18 perspectives. 19 And so I think that the discussion 20 earlier today was helpful to then get us to 21 take a step back in terms of not locking into a 22 specific numerical number. However,

1	understanding that the intent and what we're
2	trying to do is really being brought out here.
3	And then we can get to other perhaps
4	areas that we will need to, but first and
5	foremost is to establish where we have
6	agreement and what, again, getting back to, you
7	know, the attorneys who keep bugging me over
8	here. Sorry.
9	That it's really important that they
10	have the legal they hear from us our
11	rationale and considerations so that there's
12	some, you know, legal considerations that are
13	being looked at as we move forward so that they
14	can do their job that they need to do as well.
15	MR. DANNER: All right, Erin?
16	MS. MURPHY: Thanks, all. That's
17	helpful clarification.
18	I think can we flip back to the
19	principal slide, please. Thank you. Yeah, I
20	think you know my first read of this was just a
21	bit of discomfort that, you know, the intent of
22	the provision was the provision was not aimed

1 at, you know, feels to me like we're kind of 2 telling PHMSA was the intent of its own NPRM 3 is, which doesn't feel like the right posture for the committee. 4 5 But if this in fact is the intent of the committee is, 6 the committee's or 7 understanding is that the intent of this 8 section of the NPRM is to address larqe diameter pipeline blowdowns, I think, you know, 9 10 that makes more sense to me. 11 But this list of de minimis emissions is new, right? It's not something 12 13 that was in the NPRM. 14 So I guess I'm not sure that I am 15 comfortable with this level of detail in a, you 16 know, recommendation to vote on. But I am 17 trying not to bog us down if that's not, if 18 this is not, you know, language we're trying to 19 all get to consensus on right now. 20 I understand, you know, the sort of 21 explanation that these are smaller events with, 22 know, smaller blowdown event, vou а and

1 therefore less mitigation. And that maybe not 2 focusing on these and focusing on the larger 3 events would make more sense for а 4 recommendation to the agency. 5 So would you want to MR. DANNER: change this to say the committee intends that 6 7 this provision address? Well, I don't think we 8 MS. MURPHY: 9 are my perception was that this is а and then 10 discussion of principles, based on 11 this we would draft new language for number 12 So I didn't think we were trying to one. 13 finalize I defer to this language, but the 14 chair. 15 It's my understanding -MR. DANNER: 16 - well, you know, we have a few other items to 17 get to this week. So I'm hoping that this --18 that we could clarify what the intent of No. 1 19 is. I think it we're keeping the language on the other slide and this is additional, then 20

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this is really meant to illustrate what our

intention is and to provide PHMSA with guidance

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and they're developing the rules.

2 MS. BURMAN: Can I offer a 3 suggestion?

MR. DANNER: Yes.

5 MS. BURMAN: Okay. So I think that really what we're trying to say is the GPAC 6 committee, as a body, believes that the intent 7 of this provision is to address large diameter 8 9 pipeline blowdowns. And understanding that the 10 provision does not seek to, and again, Ι 11 understand you might want to switch the was not 12 aimed at.

13 And this includes the principles of, 14 and these are the things that we're laying out. 15 it really is So that the intent for our 16 sharing, our principles is to address scenarios 17 that would consumer -- customer outages. So 18 really it's the GPAC is giving a flavor for how 19 the -- how we're coming up with principles and 20 perhaps recommendations for consideration as we 21 move forward.

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And so it is needing to all of us be

1 on the same page about what the intent of the 2 provision is. We can't obviously say it is 3 clearly intended to do X because everybody may 4 have a different interpretation. But as we see 5 it, we believe that the intent of this is to do this. And these are the principles that we 6 hold with that for consideration. 7 8 MR. DANNER: All right, and I would, 9 as a friendly amendment, I would change the was 10 to is in the first sentence there. 11 I've lost track of who's next. 12 Brian? 13 I just had a question. MR. WEISKER: 14 Arvind, you mentioned the data that you looked 15 at earlier is -- was that .2 to .5, was that 16 for, I guess for stations, is that? Or was 17 that for actual, for pipeline segments? 18 Stations. MR. RAVIKUMAR: 19 MR. WEISKER: For stations? 20 MR. RAVIKUMAR: So everything that 21 have data on blowdowns, were blowdowns at 22 stations for of these exclusion some

1 categories. We actually don't have any data on 2 pipe segment blowdowns, which are the larqe 3 numbers that we discussed. Which is why I said we know what we 4 5 won't exclude and we know what the emissions So you set threshold way above that that 6 are. 7 should automatically take care of these things. 8 MR. WEISKER: And those were 9 transmission stations. 10 MR. RAVIKUMAR: Yeah, transmission 11 storage compressor stations. 12 MR. WEISKER: Thank you. 13 All right, Sara? MR. DANNER: 14 MS. GOSMAN: All right, so not to 15 wordsmith too much here, but just as a lawyer, 16 I feel like the answer is we are excluding de 17 submissions, minimis right. De minimis 18 submissions include this list of possible 19 scenarios. Just think that that's -- I don't --20 21 Т also don't like the intent issue because 22 here to PHMSA's we're not judqe intent or

1 really the intent of what this policy is about. 2 We're saying we're recommending an exclusion. Our exclusion is for de minimis 3 4 submissions. And we have this series of 5 examples of de minimis scenarios, right, for 6 that exception. And we leave it there. 7 Would you like MR. DANNER: to language on the first sentence 8 suggest some 9 there? 10 MS. GOSMAN: Yeah, okay. (Off mic 11 comments.) MR. DANNER: And de minimis is M-I-S 12 13 at the end. 14 MS. GOSMAN: So I would say, PHMSA 15 recommends that -- sorry, apologies. The GPAC 16 recommends that PHMSA exclude de minimis 17 submissions, which would include one through 18 five there. 19 Andy Drake or Chad, do MR. DANNER: 20 you have some views on that? 21 MR. DRAKE: Ι think it mav be 22 helpful also to not just talk about what it's

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not about. But I think it would be helpful to talk about what it is about. It is intended, however we want to word that, to address large pipe blowdowns, large diameter section pipeline blowdowns.

6 Because that, that is what it's 7 about. We're trying to give guidance to PHMSA. 8 To talk about what it isn't is sort of helpful, 9 but helping what it is also helps. So I just 10 offer that in thought.

11 MR. ZAMARIN: Yeah, and this is Chad 12 Zamarin. Ι wonder if, going back to the 13 language, I'm not sure, I agree, I don't think 14 it's our job to define what PHMSA's intent is. 15 But maybe we say the GPAC recommends that this 16 section address large diameter blowdowns and 17 the de minimis emissions not be focused on 18 events including.

19 So Ι think it's --I think it's 20 taking the language as it was, but instead of 21 saying that this is PHMSA's intent or the 22 intent of the section, that the GPAC recommends

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1 that, you know, this address -- this section addresses and excludes. 2 3 And maybe it needs to say that sets 4 a threshold, because I know we've talked about thresholds here. I know we're not saying we're 5 going to set that threshold, but maybe we just 6 7 need to. 8 MR. DANNER: I think we had that in 9 the other language that we're hanging this 10 onto. So if we took your --11 MR. ZAMARIN: Oh, you're right, I'm 12 sorry. 13 Edits here --MR. DANNER: 14 MR. ZAMARIN: You're right, yup, 15 thank you. 16 MR. DANNER: And hung it the on 17 other, I think we've got that captured. Erin? 18 MS. MURPHY: Thanks. You know, to 19 respond, the proposed -- the proposal issued by 20 PHMSA is not focused only on large blowdowns. 21 It's phrased to apply to all blowdowns except 22 for emergency situations.

1 So I just want to recognize that the 2 committee is discussing a recommendation to the 3 agency to narrow the proposal. And so I think 4 that's why I'm feeling, you know, a little like 5 it doesn't really make sense for the committee to represent that from the start, PHMSA was 6 7 aiming to only focus on large blowdowns. 8 So that's why I think the GPAC 9 recommendation exclude de minimis to submissions feels like sort of that is, that's 10 11 what we're recommending, right, that the 12 smaller events. 13 I think MR. ZAMARIN: Yeah, we 14 And hopeful does that language work for agree. 15 you then? I think what we're saying is this is 16 a GPAC recommendation. This is not our 17 interpretation of PHMSA's intent. This is us 18 recommending this section addresses blowdowns 19 these de minimis of these segments and not 20 events. 21 MR. DANNER: Yeah, but she's saying 22 it's just the blowdowns than in large more

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pipeline segments, is that correct?

MS. MURPHY: 2 I think I'm saying that 3 I don't have the technical expertise to know if 4 blowdowns of large pipeline segments and then 5 this list of one through five is the entire universe of sort of potential blowdown events 6 7 that might be encompassed by the NPRM.

And so it feels like the area where 8 9 is the exclusion is we have consensus _ _ 10 recommending, you know, the exclusion of these 11 smaller scale events. And I'd feel more comfortable just sort of putting that specific 12 13 statement in the recommendation and not saying 14 that we recommend it only address the blowdowns 15 of large pipeline segments.

16 If I'm not making sense, you can 17 tell me that for sure.

18 MR. DANNER: While you're mulling 19 that, Peter.

20 MR. CHACE: Thank you. Pete Chace, 21 NAPSR. 22 Quick question. When you say ESD

1 testing, what kind of testing are we talking 2 about? Because I can picture that being a 3 truly impressive amount of emissions. 4 Τt could include an MR. DRAKE: 5 entire compressor station, multiple pipelines, quite significant. 6 7 Well, is that the type MR. CHACE: 8 of thing we want to exclude? 9 MR. ZAMARIN: Yeah, again, I think 10 we need to go back to the data on that. Ι 11 mean, it's -- those are not the scenarios where 12 we have great options for recompression. 13 I mean, again, when I think about 14 where this, the intent of this segment was, 15 which is why I do think, Erin, I think it's 16 important to -- and I appreciate we're adding 17 specificity than was in the original more 18 language. 19 But the focus has been on mainline 20 pipeline blowdowns and mitigation activities 21 that we can implement to minimize the emissions 22 from those blowdowns. We don't have the same

1 size of emissions from our compressor stations. 2 Ι But also, mean, aqain, we're 3 talking about the difference between a 50-mile 4 segment of a pipe and a single facility. And 5 the technologies that we're working on are designed to recompress gas from a long, large 6 7 segment of pipe. 8 Those aren't being -- those are not 9 the same capabilities that we have in like a 10 compressor station where we have to test the 11 ESDs, the emergency shutdown device, we have to 12 test that device. 13 Again, I think we've got to start 14 with what the real issue has been and that 15 we're focused on, which, when I look at the 16 language, it's very clear to me that it only 17 works for pipeline blowdowns. And but it has 18 the potential to pull in things that weren't --19 that will not be practical. 20 MR. DANNER: Could we just modify 21 No. 5 by just saying certain ESD testing and 22 leave it -- leave it alone otherwise?

1	All right, Andy, you have your card
2	up.
3	MR. DRAKE: This is Andy Drake with
4	Enbridge. I really think that what strikes me
5	in the reason to include, you know, to argue.
6	But I think if we're not going to come out with
7	a definitive threshold number, which I think is
8	sort of, we're sort of tabling that right now.
9	We're trying to give more context
10	and clarity about what it is to give guidance
11	to PHMSA to define in enforcement. What is it?
12	I'm sorry, but Rod, you're the man
13	of the hour. So we're trying to help provide
14	them clarity about what is it that we're trying
15	to get them to focus on. And so we're sort of
16	backing into it a little bit.
17	It's like, you know, we look at
18	Arvind's numbers and other numbers, and they're
19	telling us large section blowdowns are, you
20	know, 500, you know, a million, whatever. And
21	I think now we're just taking the number out.
22	And we're saying things like this and things

not like that.

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2	So things not like, you know,
3	station work. We don't want to do barrels, we
4	don't want to do meter station work. We don't
5	want to do routine work in the compressor
6	station. Those aren't the things that are the
7	big volumes.
8	So in the absence of giving a
9	number, we're trying to give characterization.
10	That's really where the what-is-it part came
11	from. It wasn't meant to, let me see, meant to
12	exclude. I guess it was kind of meant to
13	exclude. It was meant to focus on what it is
14	that they should be looking at when they come
15	to enforce.
16	I don't know if that helps, but that
17	was the intent of the conversation.
18	MR. DANNER: All right. And I do
19	want to remind us that we are sort of focused
20	here on this as a principle, not as legally
21	binding. And of course, you know, this is to
22	help PHMSA actually draft the rules, and we're

just advising.

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2 So Chad? 3 MR. GILBERT: Yes, my thoughts from hearing 4 the very good collaboration, and to 5 thank PHMSA for the job that you have done putting together the NPRM. 6 threshold 7 the should But be 8 established, and that would eliminate the type 9 of conversation that we're having now. And I 10 feel that PHMSA would be the one that would 11 have the data in the communication to establish that threshold. 12 Thank you. 13 MR. DANNER: Thank you. All right, 14 I think at this point maybe we need to call the 15 question on this one. We have some language 16 here that we would append to the No. 1 on the other slide. And this would be -- so this is 17 18 basically our recommendation to PHMSA. 19 I think we've negotiated some And 20 language here that I can live with. And so 21 could I just get -- this isn't going to be the 22 formal vote. We'll take a formal vote when we

1	get through all five of these.
2	But can I just get a sense, are we
3	ready to move on from this one? Anybody not
4	ready to move on from this one?
5	Erin, you're frowning. Diane?
6	MS. BURMAN: Yeah, I just, I think
7	it's really important that we take a collective
8	vote, but I also think it's important that we
9	have initially unanimous agreement here.
10	Because I do think that we're laying the
11	framework for how we're then going to delve
12	into other things.
13	And so for me, the first vote should
14	be non-controversial in that we're coming to
15	agreement, we're understanding where we are.
16	We started out with, you know, disagreement on
17	what that number should be. And I think we've
18	gone now to trying to understand each other and
19	trying to incorporate the principles that will
20	help for consideration that PHMSA will then
21	have to look at.
22	And there's nothing technically

1	legally binding in that these are our
2	recommendations for PHMSA to consider. And so
3	we're really trying to give them the tools
4	based on our collective voices here.
5	So I just want to make sure that we
6	don't sort of if there are still needs for
7	some, you know, tweaking, that we do that
8	before we vote, we jump into something.
9	MR. DANNER: Yeah. Chad and then
10	Sara? Oh, okay, your tent card's up.
11	MR. GILBERT: Oh, I'm sorry.
12	MR. DANNER: Sara?
13	MS. GOSMAN: Yeah, so I'm in
14	agreement with this and I appreciate the way in
15	which we've come to a middle here and using
16	principles to understand what the policy issue
17	is. I will just put forward what's meant to be
18	a friendly amendment, which is I think de
19	minimis matters here. That's the term we use
20	in the principles.
21	So I think if we could add that here
22	instead of minimum volume, it just connects

1 this language to the principles language that we have in that next slide. And it also makes 2 3 clear that what we really care about here is, 4 you know, we're not putting a number here, 5 But what we're trying to get at are right. these smaller blowdowns. 6 7 that it's not about And sort of 8 methods, right. We have methods are another 9 question. It's really about the volume here. 10 And so de minimis captures that I think very 11 well. So friendly amendment. 12 MR. DANNER: Okay, it is as so 13 written up here now? Any thoughts or anyone 14 opposed to that amendment? Okay. So I think 15 we are ready to -- John? 16 MR. GALE: Can we get somebody to 17 read the principles into the record so it gets 18 into the transcript? 19 Yeah, do we need to do MR. DANNER: 20 that now or can we do that when --21 MR. GALE: We can do it later --22 MR. DANNER: When we take the final

1 vote, yeah. And it might be if you can cut and 2 paste and put this onto the other slide, it 3 would be very helpful. 4 So No. 2, exceptions if there would 5 significant impact be а safety risk or to 6 operators must document the customers, 7 justification rationale for and such 8 exceptions. 9 issues with this Anyone have any 10 one? Brian? 11 MR. WEISKER: This is Brian Weisker, Duke Energy. I'll wait for No. 4 to come up, 12 13 sorry. 14 MR. DANNER: All right. Anyone want to comment on this one? Diane? 15 16 MS. BURMAN: Yeah, I'm just 17 concerned that we're going to get off track or 18 lose track if we don't have, take the first 19 vote on the first bullet combined with the 20 principles. We can do that and then get to the 21 next sort of bullets and go through in I think 22 a much more deliberative fashion. And also

1 make sure that we're all on the same page. Otherwise I'm afraid we'll 2 start 3 slipping back into, you know, what we -- what 4 we didn't vote on and wanting to tweak. So I 5 feel like if we take the first, it helps us. Well, that means we may 6 MR. DANNER: have five votes then. 7 That's fine. 8 MS. BURMAN: 9 MR. DANNER: That's all right with 10 you? 11 MS. BURMAN: Ten votes are good by 12 me. 13 I think we can limit it MR. DANNER: 14 to five. 15 All right, can we see the -- it is 16 possible to cut and paste the -- okay. But I 17 will begin reading this one. 18 So, it is before the committee to 19 approve the following language. PHMSA should 20 create an exception to Section 192.770 for non-21 emergency blowdowns with a de minimis volume 22 consistent with the principles outlined by

1 Member Drake and considering available data on releases -- releases from blowdowns. 2 3 The GPAC recommends this section 4 address blowdown of large pipeline segments, 5 but exclude de minimis submissions, including, one, blowdowns of launchers and receivers that 6 7 may be -- may not be within the confines of a Two, blowdowns from work 8 compressor station.

10 Three, blowdowns from maintenance 11 work on compressor units and associated 12 equipment including relief systems and filter 13 Four, blowdowns to conduct separators. an 14 immediate anomaly and excavation. And five, 15 ESD testing.

on measurement and regulation stations.

16 So that is the language before us. 17 I think there are some friendly amendments to 18 clarify things.

19 Andy? 20 MR. DRAKE: This is Andy Drake with 21 Enbridge. I would recommend that we take my 22 name out of there. I think that --

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1	MR. DANNER: I was going to I was
2	going to do that too. Actually I was going to
3	I thought we'd want to memorialize your
4	participation here.
5	MR. DRAKE: I appreciate that right
б	before I retire.
7	MR. DANNER: Yeah.
8	MR. DRAKE: That I would be
9	memorialized somehow.
10	MR. DANNER: Yeah, this would be the
11	Andy Drake rule. So Erin?
12	MS. MURPHY: Were we going to add
13	certain ESD testing?
14	MR. DANNER: I did propose that. Is
15	there a because Peter raised concerns that
16	ESD testing could be very large and
17	significant. And I just, I threw out the word
18	certain there just to clarify that not all ESD
19	testing is the same.
20	Peter?
21	MR. CHACE: And just my
22	understanding of ESD testing, right, you can

1 essentially simulate the electronics of lifting 2 things. Or you can just cut it loose, and I 3 mean the ground shakes like it's a -- well. 4 There's ESD testing and there's ESD testing. 5 is Another point blowdowns to conduct an immediate anomaly. 6 There's always 7 the option of taking a pressure reduction until 8 you can get the gear out there. So some of 9 this --10 MR. DANNER: So --11 MR. CHACE: I think there's some 12 devils in these details. 13 Okay, Brian, did you --MR. DANNER: 14 oh, you just set your card down. Did you want 15 to say anything? 16 MR. WEISKER: I have some for the 17 last bullet. But I think he should answer --18 MR. DANNER: Okay, Chad. 19 MR. WEISKER: Help answer Peter's 20 question. 21 MR. DANNER: Chad, you want to? 22 MR. ZAMARIN: Yeah, just one cleanup

1 I don't know that we need that very, note. very last bullet below five on scenarios 2 3 affecting customer outages. I thought that was 4 on a different topic. 5 MR. DANNER: It is, that's not part of this recommendation. 6 7 MR. ZAMARIN: Okay. And then on the 8 point about ESDs, I don't disagree, but I would 9 also maybe for different save that а 10 discussion. 11 Ι mean, right now operators are trying to fit -- trying to develop methods for, 12 13 again, I think of when I list, when I read all 14 the requirements of this section, it's about 15 mitigating emissions of blowdowns where the 16 tools that we've identified could be 17 applicable. 18 That would not be applicable in a 19 station ESD test. We are working on 20 methodologies to minimize, and to your point, 21 to test different methodologies that simulate 22 an ESD but don't require a blowdown in the

facility.

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2	I don't think it fits in this
3	section. In this section, if that falls under
4	the into the discussion, we'll be doing
5	things like recompression and those just don't
6	those aren't designed for station ESD tests.
7	So I do think you have to be clear.
8	And if that's an issue that needs to
9	be further addressed from the regulations
10	perspective, I think it fits somewhere else. I
11	just don't think it fits here.
12	MR. DANNER: So you want to take out
13	five altogether, or?
14	MR. ZAMARIN: No, I would leave ESD
15	testing. And I would, again, I wouldn't say
16	certain ESD testing unless somebody can show
17	that the methodologies that are identified that
18	need to be implemented could be implemented for
19	ESD testing and reducing emissions.
20	I think they are it is clear to
21	me as an operator that when I read those lists
22	of mitigation measures, that those are focused

1 on what you would do to minimize the blowdown 2 of a pipeline segment, not of a station test of 3 an ESD system. MR. DANNER: 4 So again, this is just 5 a principle that we're sending to PHMSA, and I 6 think based on the discussion, PHMSA knows what 7 we're talking about. And I think they'd know 8 what we're talking about either way. 9 MR. ZAMARIN: Yeah. 10 MR. DANNER: So what is the sense of 11 the group, does the word certain go or stay? 12 Brian? 13 Brian Weisker. MR. WEISKER: Ι 14 suggest it goes. Just because when I think 15 about ESD testing, it's designed for, I mean, 16 you think about probably the most important 17 critical test that we perform at a compressor 18 station to assure that in an emergency that 19 it'll shut, your unit will shut down safely. 20 And I think that's the reason behind having an 21 ESD test. 22 And so I just think, I think it

1 needs --2 MR. DANNER: All right, Peter, you 3 have thoughts on this? 4 CHACE: Yeah, I think MR. that's 5 fair, that's just. 6 All right. MR. DANNER: Sara? 7 MS. GOSMAN: Yeah, so. So we are so 8 close. So I think that Chad, what I'm hearing 9 from you is that there's a different concern It doesn't relate to sort of the de 10 here. 11 minimis piece, it relates to something about 12 whether this just works, right, in this 13 situation. 14 I don't feel like that's our list. 15 Like our list is really about de minimis, which 16 is why I think that volume thing matters. So I 17 think certain gets at that issue and doesn't 18 new exclusion. Ι feel like create а what 19 recommending is sort of a different you're 20 category of exclusions. 21 And frankly I don't have enough of 22 the technical knowledge to know what that would
1 look like, right. So I think rather than, you 2 know, you get that on the record, right. You 3 get your concern on the record. 4 We acknowledge that not all of that 5 ESD testing may be subject to this exclusion. 6 We leave it. make to PHMSA to that 7 determination. Then we vote and move on. 8 MR. DANNER: So my problem is I'm 9 okay either way. So I have to leave it to you 10 to decide where we go. 11 Chad, yes. 12 MR. ZAMARIN: Yeah, Ι think Ι 13 understand. I'm not -- I think the problem 14 with having it in there implies that there are 15 for which this section should certain ESDs 16 apply. And I think we're trying to give clear 17 guidance on how the threshold should be 18 established and what PHSMA should be mitigating 19 emissions for. 20 And know, these you are just examples and there are others. 21 But this seems 22 like a pretty obvious one to me where when you

look at the data you look at station ESD testing, you can't have a threshold that pulls in a station ESD test and then applies a bunch of techniques that don't work for a station ESD.

6 So I worry that having the language 7 -- having certain added implies that there are 8 some station ESDs that we think are intended to 9 be addressed. And I just don't think that's 10 the case.

11 I can go on the record with that 12 but Ι think, concern, and we can move on, 13 again, I think clarity matters. And I think 14 this makes it less clear and opens it up to 15 interpretation.

16 MR. DANNER: All right. Diane. 17 I wonder if we could MS. BURMAN: 18 strike certain and do an ESD testing as 19 relevant to the intent relevant or as or 20 something, so that it's clear and you don't --21 because I do think that if you see certain ESD 22 testing, you know, a regulator like the state

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1 regulator may say, well, what's in, what's out. 2 And so the ESD testing is relevant, PHMSA will understand what that is. And T 3 4 think it won't create a confusion. T don't 5 know if that helps, if that gets us to all being okay with it. But it doesn't get rid of 6 7 your concern, Erin. It makes sure that it's 8 there. 9 So, thoughts on this? MR. DANNER: 10 Okay, I think you've come up with a solution. 11 Peter? MR. CHACE: My point was just that I 12 13 would not describe ESD testing as a de minimis 14 activity whatsoever. If it's outside of the 15 scope of what we're trying to achieve, that's fine. 16 17 Okay, but if MR. DANNER: it's 18 relevant, it's included, if it's not relevant, 19 it's not. So I think -- I think we've got it. 20 With the language that is up on the screen, 21 John Gale, do I have to read this again, or do 22 we think it's captured?

1	MR. GALE: John Gale, PHMSA.
2	Chairman, it would be best if we actually had a
3	motion and that a committee member made a
4	motion. But we can I think it's also
5	important actually for the staff that it gets
6	read into the transcript. Because right now,
7	it is not read into the transcript.
8	MR. DANNER: All right. All right,
9	this truly is the Andy Drake rule.
10	Andy, would you like to make a
11	motion?
12	MR. DRAKE: Andy Drake with
13	Enbridge. I thought that would come back to me
14	somehow, so I just thought I'd be proactive in
15	that.
16	I'd like to propose that the
17	proposed rule as published in the Federal
18	Register and as supported by the Preliminary
19	Regulatory Impact Analysis and Draft
20	Environmental Assessments with regard to
21	blowdown mitigation, Section 192.770, is
22	technically feasible, reasonable, and cost-

effective and practicable if the following
 changes are made.

3 One, that PHSMA should create an 4 exception 192.770 for to non-emergency 5 blowdowns with a de minimis volume consistent 6 with the principles outlined below and 7 considering available data to release on releases from blowdowns. 8

9 that recommends the One, GPAC blowdowns of 10 section address larqe diameter 11 pipeline segments but exclude de minimis 12 emissions, including: 1, blowdowns of launchers may not be within 13 and receivers that the 14 confines of a compressor station. 2, blowdowns 15 from work on measurement and regulation 16 stations.

3, blowdowns from maintenance work
on compressor units and associated equipment
including relief systems and filter separators.
4, blowdowns to conduct an immediate anomaly
repair and excavation. And 5, ESD testing as
relevant.

MR. DANNER: Thank you very much.
Is there a second? Sara?
MS. GOSMAN: I second.
MR. DANNER: Thank you very much.
All right, we're ready for the vote.
Cameron, do you want to take roll?
MR. SATTERTHWAITE: Sorry. Okay. I
will say your name, and if you agree, say yes,
if not, say no, and I will tally the votes.
I'll start off with Diane Burman.
MS. BURMAN: Yes.
MR. SATTERTHWAITE: Peter Chace?
MR. CHACE: Yes.
MR. SATTERTHWAITE: David Danner?
MR. DANNER: Yes.
MR. SATTERTHWAITE: Sara Longan?
MS. LONGAN: Yes.
MR. SATTERTHWAITE: Terry Turpin?
MR. TURPIN: Yes.
MR. SATTERTHWAITE: Brian Weisker?
MR. WEISKER: Yes.
MR. SATTERTHWAITE: Andy Drake?

1	MR. DRAKE: Yes.
2	MR. SATTERTHWAITE: Alex Dewar?
3	MR. DEWAR: Yes.
4	MR. SATTERTHWAITE: Steve Squibb?
5	MR. SQUIBB: Yes.
б	MR. SATTERTHWAITE: Chad Zamarin?
7	MR. ZAMARIN: Yes.
8	MR. SATTERTHWAITE: Chad Gilbert?
9	MR. GILBERT: Yes.
10	MR. SATTERTHWAITE: I heard that
11	yes. Arvind Ravikumar?
12	MR. RAVIKUMAR: Yes.
13	MR. SATTERTHWAITE: Erin Murphy?
14	MS. MURPHY: Yes.
15	MR. SATTERTHWAITE: Sara Gosman?
16	MS. GOSMAN: Yes.
17	MR. SATTERTHWAITE: Sam Ariaratnam?
18	MR. ARIARATNAM: Yes.
19	MR. SATTERTHWAITE: It is unanimous.
20	The motion carries.
21	MR. DANNER: All right, thank you
22	very much. Let's move on to the next sentence

1	that, formerly No. 2 on the on the slide.
2	Sure. (Off mic comments.)
3	Okay, so now we have language before
4	us. Exceptions if there would be a safely risk
5	or significant impact to customers, operators
6	must document the justification and rationale
7	for such exceptions.
8	Is there anyone with concerns about
9	this language?
10	Sara?
11	MS. GOSMAN: Yes. So, again, a
12	friendly amendment here. I think we want to be
13	focusing on outages, that is customer impacts
14	at the end, as opposed to market impacts
15	related to higher prices. And so I would like
16	to see significant impact to negative
17	significant impact to customers such as
18	customer outages in that language.
19	And if somebody has better, a better
20	suggestion in terms of language but gets at
21	that same issue, I'm completely open to it.
22	MR. DANNER: All right, thank you.

1	Diane?
2	MS. BURMAN: I think the language
3	that we had gotten rid of at the end of the
4	first one is what was relevant here, if I
5	remember. We took out customer outages, PHSMA
6	shall consider.
7	MR. DANNER: So
8	MS. BURMAN: When we had bullet one,
9	and at the bottom we had a sentence, I think
10	that sentence was intended for this bullet
11	here.
12	MR. DANNER: Oh, okay. So can we
13	MS. BURMAN: And I don't remember
14	exactly, but I remember
15	MR. DANNER: Go back to the other
16	slide then, John?
17	MS. BURMAN: That language may
18	address Sara's issue.
19	MR. DANNER: Yeah, we have to go
20	back to the original.
21	MS. BURMAN: And it wasn't the
22	intent. It was I think GPAC and again, I'm

1	sorry, but I think that language, that sentence
2	was what was meant here. Yes, yeah.
3	MR. DANNER: All right, Sara Gosman,
4	does that address your concerns?
5	MS. GOSMAN: Yes, I think that's
6	fine.
7	MR. DANNER: Okay. Any other
8	Chad?
9	MR. ZAMARIN: Yeah, I do think this
10	raises an important discussion. I maybe hear
11	from some of the state commissioners. I mean,
12	there have been incidents in the last several
13	years where pipeline constraints have led to
14	significant costs to customers.
15	And frankly, I think, you know, if
16	we were to be forced with making decisions, and
17	there will be times when we'll be forced to
18	make decisions based on whether or not we can
19	reduce emissions some amount or put at risk
20	significantly higher cost to consumers.
21	And I do think that's a decision
22	that should be adjudicated elsewhere at the

at the local level. And I do think that those are important considerations. And just to put it in context, we were talking about there are markets that have seen gas prices go from \$3 to \$100, \$300.

And so I don't know that you want to -- I don't know that I'm comfortable saying that we're the right group to determine whether or not that's a significant impact or not and should or shouldn't warrant, you know, a certain behavior.

12 And I'm more interested in hearing 13 from the utility commissioners, because this is 14 a -- I will say on our system, I mean we span across the entire United States. And over the 15 16 last three years, we've seen more volatility in 17 price during, in particular, storm events. And 18 those sometimes are the same times where you 19 have outages that could be impacted by what 20 we're talking about today. 21 MS. BURMAN: So I --

MR. DANNER: Commissioner Burman.

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MS. Т think it's BURMAN: really that we recognize that reliability important and safety of the system and the costs are very when we're And that important. looking at customer outages, there's a whole host of issues that must be considered.

7 need to that the And we ensure 8 operators are making decisions without having 9 to worry about, you know, putting safety in 10 jeopardy. And so from my perspective, to the 11 extent that we have enabled operators to have the flexibility in what they're doing without -12 13 and documenting it, I think that's very 14 helpful.

15 think that Ι do there is а 16 discussion to be had, perhaps not here, on 17 who's responsible for the oversight of all of 18 that. And so PHSMA, PHMSA needs to care about 19 reliability just as much as the regulator, the 20 regulator. But the scenarios on state 21 affecting customer outages, you know, will have 22 different lenses.

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1 So I do think that we have to get 2 back to what's the principle here that we are 3 trying to address to aive PHMSA some 4 understanding of where GPAC is landing. For 5 me, the reliability of the system is paramount. And Т do think that 6 customer 7 outages, you know, we saw, you know, winter, 8 winter storm Elliot is a perfect example, and 9 the FERC discussion over the system in New York 10 City is significantly relevant and weighs on us 11 we're coming up to Christmas Eve and as 12 Christmas Day again. 13 So how do we do this in a way that 14 makes sure that folks are not blocked in their 15 decisionmaking. And I don't know, but I think 16 it's significant. 17 So I just, speaking as MR. DANNER: 18 regulator, I think there's a difference а 19 between upward pressure on rates and 20 significant rate shock. And Ι think that 21 insofar as, you know, there's upward pressure 22 on rates, I don't think that is something that

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1	we should be talking about here.
2	If it is talking about significant
3	rate shock, for example, after a pipeline has
4	ruptured and suddenly the costs go up, as Chad
5	was talking about, and we've seen that in the
6	Northwest, that I think if we added the
7	language either to the first sentence or the
8	third sentence to just add or significant rate
9	shock, I would be okay adding that language.
10	But I want to be very careful that
11	we're not talking about just upward pressure on
12	rates. Because you know, any kind of climate
13	reduction, climate emissions reductions is
14	going to have some impact on rates. And that
15	shouldn't be a ticket to have an exception.
16	Erin?
17	MS. MURPHY: Appreciate the
18	discussion. Oh, Erin Murphy with EDF.
19	I agree with the language that Chair
20	Danner just proposed. It doesn't necessarily
21	feel appropriate to me to be diving in here to
22	an exception to this really important blowdown

mitigation provision when blowdowns are such a

major source of emissions from transmission pipelines for sort of general customer cost to be relevant to weighing whether or not to mitigate a blowdown.

6 But here the concern around, you 7 know, safety and reliability is paramount and 8 avoiding outages or a significant rate shock is 9 relevant to the process.

10 So I think I want to go back to a 11 point I made earlier, which is that I think 12 that safety risk language could be removed. 13 There's already in the NPRM a provision related 14 emergencies that addresses safety, Ι to so 15 think the committee needs to make don't an 16 additional recommendation on something that's already in the NPRM. 17

18 in And then, also, the second 19 sentence, I would propose adding that operators 20 must document and report the justification and 21 rationale for such exceptions SO that that 22 information goes to PHMSA.

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1	MR. DANNER: All right, any
2	discussion on Erin's proposal?
3	MR. ZAMARIN: Chad Zamarin with
4	Williams. I just want to make clear I agree,
5	and I think the language in this section does
б	address safety issues. I wouldn't want us to
7	exclude that and have it interpreted that we
8	didn't mean for that to be one of those
9	exceptions. And I don't think that's what
10	you're saying.
11	That was the only reason why I was
12	comfortable with that language in there. And
13	I'm also comfortable, the rate shock issue was
14	the issue that I was hoping that would be
15	addressed. So I think this language works on
16	that front.
17	But I do think that it's important
18	that our recommendation not having the
19	reference to safety and emergency events
20	doesn't mean that we don't think that that's an
21	important part of the language. Because I
22	think it's in there now as part of the NPRM,

2 there, I think is what I'm hearing. Okay, 3 thanks. Okay, can we put that 4 MR. DANNER: 5 language back in? Because I think it's been removed. Yeah, all right, is there any --6 7 Commissioner Burman, are you comfortable with 8 this? 9 Can I just read it out MS. BURMAN: 10 loud so I make Ι am hearing it? In sure 11 addition to the proposed exception for when 12 there is a negative impact on safety, add an 13 exception for when there would be a significant 14 negative impact to customers, such as outages 15 or significant rate shock. 16 Operators must document and report 17 justification and rationale the for such 18 The GPAC recommends PHMSA address exceptions. 19 scenarios that would affect customer outages. 20 I would just want to add in, GPAC 21 recommends PHMSA address, as appropriate, 22 scenarios that would affect customers' outages.

and I think we're saying it should remain in

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1	Is that yeah, I think that's because I
2	don't, I think that I want to make sure that
3	we are understanding the role of the state
4	regulator versus the federal regulator. And so
5	as appropriate.
6	MR. DANNER: All right, any
7	discussion on that? Brian?
8	MR. WEISKER: Brian Weisker, Duke
9	Energy. Similar to what we talked about
10	earlier about reporting being covered later, I
11	suggest that we remove and report, that the
12	operators must document the justification and
13	rationale, and we'll talk about reporting
14	later.
15	MR. DANNER: Okay, Andy and then
16	Erin.
17	MR. DRAKE: This is Andy Drake with
18	Enbridge. I'm fine, actually, with taking out
19	the issue about safety. I think we've got it
20	on the record here what we were talking about.
21	That's covered in other segments. I think we -
22	- whether it's in our out, I think that's to

me.

2	But I do want to make a point for
3	the record, and that is that we're talking
4	about rates. That's one dimension. I think
5	there's some dimension of impact to society. I
6	mean, when it gets cold and we're down, the
7	rates may not adjust because it's happening too
8	quickly. Somebody's just out of gas. And we're
9	trying to deal with that that quickly.
10	And I just want that recorded at
11	least in the record of this discussion. When
12	we talk to somebody like a customer or the PUC
13	or somebody, they may say we're not talking
14	about rates, we're talking about keeping that
15	subdivision in gas this winter, today.
16	MR. DANNER: Yeah. You may have
17	noticed there was a disruption in British
18	Columbia recently. And power or gas was cut
19	off to a dairy that produces a lot of the milk
20	that people actually have to drink to get by.
21	And so there was a certain impact there.
22	And so I don't disagree, but I do

1 note the language says such as, which means it's not intended to be an exclusive list --2 3 MR. DRAKE: I agree. And that's why 4 I said I'm not sure if asking for the language 5 to be changed, I just want it for the record. we this conversation 6 Because as have qoinq 7 it's really did forward, the operator make appropriate considerations in the discussions. 8 9 Were they talking to the right people about the 10 right things? And it wasn't about rates, it was 11 12 about a lot of things. It may be about just 13 service to a customer on a cold day, you know, 14 a house, a neighborhood, a hospital, not 15 somebody significant to. 16 MR. DANNER: Yeah, thank you. For 17 this discussion purposes, Ι think that my 18 clarifies what -- and I thought when I saw the 19 language such as. Erin? 20 21 MS. MURPHY: Erin Murphy with EDF. 22 Just I want to express concern about Brian's

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1 reporting proposal to remove here. Т 2 absolutely recognize there's a later, you know, 3 discussion scheduled for some of the other 4 reporting requirements that are in the NPRM. 5 But I think for me, you know, part of what's 6 important about creating an 7 additional exception to blowdown emissions 8 mitigation is that that, you know, information 9 for what sort of led to the operator exercising 10 the exception is reported to the agency. 11 So it's harder to feel comfortable there's 12 supporting this if reporting no 13 requirement here, and that's something that may 14 not, you know, be supported by the may or 15 committee later in the discussion. So from my 16 perspective, that's important to include. 17 Okay, and just from my MR. DANNER: 18 point of view, I also agree that that language 19 should stay in. 20 And Ι also just note this is а recommendation to PHMSA. 21 PHMSA can harmonize 22 this requirement with the other discussions we

1 have about reporting. And they can accept or 2 reject what we are putting in here. 3 So I am very comfortable having and report in there, just for what that's worth. 4 Okay, Chad, I think you were next. 5 MR. ZAMARIN: Yeah, thank you. 6 Chad Zamarin with Williams. I'm comfortable with 7 8 the concept, but I do wonder if we should state 9 reporting should be addressed in the that 10 section on reporting. 11 I think the concern is that if you 12 start putting reporting requirements, you know, 13 I think for example adding something to the 14 reporting requirements for blowdown annual 15 mitigation and the results, you know. I think 16 we have to be careful that if you just add and 17 report in sections throughout the code and you 18 don't include that in the reporting section, I 19 think things can get very messy and hard to 20 harmonize, to your point. 21 And so I just wonder if we say, you 22 should document this, know, you and PHSMA

1 should include reporting requirements in 2 Section 6, which is the section on reporting. 3 MR. DANNER: What if we took out the 4 words and report there, and then at the end of 5 that sentence, put a comma and said subject to the reporting requirements of Section 6? 6 7 MR. DRAKE: Yeah, I think something 8 to that effect that just -- because what 9 happens if we put it in this section that a 10 reporting requirement should be included in 11 this section, we'll get specific reporting 12 requirements sprinkled throughout the code 13 instead of where I think it makes sense, in a 14 more consolidated place. 15 MR. DANNER: Erin, would that be a 16 suitable compromise? 17 MS. MURPHY: I quess. I don't read 18 our recommendation as being so specific that 19 we're telling PHMSA which, you know, part of 20 know, the CFR, you we recommend they 21 incorporate the reporting requirement. So I 22 don't have that same concern.

1	But if it's helpful to others, I'm
2	comfortable with I think the language that
3	Chair Danner said, to sort of add it at the end
4	as adding a reporting requirement in the other
5	section.
6	MR. DANNER: So is there any other
7	thoughts on that language proposal? So at the
8	end of the sentence it would say subject to
9	reporting requirements of Section 6.
10	Peter?
11	MR. CHACE: Thanks. Pete Chace,
12	NAPSR, just something I honestly just want to
13	get off my chest. I'm a little uncomfortable
14	having mentioned rates in the safety
15	regulations. I don't know what to do about it.
16	I mean really I think what we want is, look, if
17	political reality collides with the rules, pick
18	up the phone and call Tristan and tell him that
19	you want to keep the line going. I don't know.
20	I don't have any concrete proposals, but I mean
21	this is a safety regulation.
22	Also, just as a general comment with

reporting, if there is a large-scale outage, that's really going to be of interest to the state commissions and we'd love to see a reporting requirement also extend to the state programs so we can just have the knowledge of the potential outages and risks that are coming our way.

8 MR. DANNER: Thank you. You know, I 9 just want to sav Ι understand what you're 10 saying about the rate shock language in there. 11 And generally, it would probably be me having to make that call to Tristan. But again, this 12 13 is the itself, this is not rule а 14 recommendation. So if they have situational 15 awareness about what our concerns are, and I 16 think it's really important that we let them know that this is a concern, just as having a 17 18 high impact on a particular industry that is an 19 essential industry is also a concern. So I am 20 willing to make an exception to the concerns 21 you raise in terms of this language because 22 again, I think it is situational awareness to

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PHMSA.

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2 Yes, Arvind? 3 MR. RAVIKUMAR: I iust want to 4 highlight one point specific to the reporting 5 requirements here. Emissions from pipeline 6 blowdowns, they're not routine events. They 7 large emissions. They hopefully are verv 8 happen rarely and they are not routine. Ι think 9 where it's reported here in the or 10 reported section it should be separately 11 reported as a large release, even category, as 12 opposed regular reporting station to on 13 blowdowns and other routine emissions. 14 MR. DANNER: Is there particular 15 language that you would want to put in? 16 MR. RAVIKUMAR: No, I think the 17 language is fine. It's just when we get to 18 reporting that I hear or in that section it 19 needs to be a separate category. Okay. I think that's 20 MR. DANNER: 21 duly noted. 22 All right, we have language here --

oh, Diane, yes.

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2	MS. BURMAN: So, I think that the
3	language on significant rate shock I think I
4	understand what we're trying to do. I think
5	that as I look forward though, that's for me
6	it's more about the mitigation of costs that
7	are really related to anticipated long duration
8	outages, the need to secure alternate supply,
9	restoration, et cetera. So I think we just
10	I think I just need to kind of process what
11	we're saying because the significant rate
12	shocks that can happen from many different
13	things. And so what we're really trying to do
14	here I don't know, I think I'm just
15	grappling with making sure that we're all
16	understanding because what we're saying on
17	significant rate shock.
18	MR. DANNER: Yes, I mean this is one
19	that as I grapple with this, I mean it's
20	customer outages are probably what most of what
21	this is going to be about. The significant

rate shocks, I really -- I intend for that to

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1 very, very high bar, that this is be а 2 something that we've seen it in the Northwest 3 where the prices go up six or seven times or 4 times over night and there could be ten 5 something where if we are able to negotiate an exception then we can mitigate those impacts. 6 7 this So again, Ι see as kind of raising 8 situational awareness and I'm not sure how 9 PHMSA would do that. But that's my -- that 10 would my intent of leaving it. 11 MS. BURMAN: And I do -- I think I

12 want to offer up a friendly amendment, too, at 13 the end where it says operators must document 14 justification and rationale for the such 15 exceptions period. And then say the GPAC 16 recommends PHMSA also address appropriate 17 reporting requirements period. The GPAC 18 recommends them and then the section, next 19 because otherwise it's just like we're really 20 all we did was move the reporting to the end of 21 that sentence and really, it's to the extent 22 that there needs to be a discussion on

1 reporting, I think it should stand alone. I 2 don't know. I don't want to over think it, but 3 I am concerned that --4 MR. DANNER: Yes, I think that that

makes sense. I'd be interested to hear what others have to say on that good fix.

Erin?

MS. MURPHY: I think I'm a little 8 confused 9 what the committee's now 10 recommendation is. My recommendation was that 11 the documentation of the justification and 12 rationale for exercising this exception should 13 agency and that be reported to the GPAC 14 recommend that PHMSA require operators to 15 document their justification and rationale and 16 report it to the agency.

17 Are this language, Ι we now _ _ 18 guess, starts to make me feel like we're going 19 to debate whether or this should be not 20 reported when we get to a later day.

21 MR. DANNER: So I think that the 22 former language made sure that this

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1 documentation was subject to the reporting 2 requirements in Section 6. And Commissioner 3 Burman is suggesting that we break that out. 4 MS. MURPHY: Yes. 5 MR. DANNER: What I'm hearing is a concern that that somehow just becomes a vague 6 7 PHMSA should discuss reporting requirements as 8 opposed to this justification should be 9 reported subject to the requirements of Section 10 6. 11 MS. BURMAN: So here it says 12 operators must document a report -- and report, 13 I think is coming out regardless whether we 14 have a new sentence or not. So if it says 15 operators must document the justification and 16 rationale for such exceptions period. GPAC 17 recommends PHMSA -- and now I forget what I 18 said. But -- PHMSA address --19 Establish reporting MR. DANNER: 20 requirements. 21 MS. BURMAN: Right. 22 And if you put in the MR. DANNER:

language for this documentation in Section 6, I think that might address --

3 MS. BURMAN: It actually is also -trying to do is make sure 4 what I'm that regardless of what happens with reporting, that 5 the documentation must be done, must document. 6 7 And then it is for PHMSA to also look what the 8 reporting requirements may need to be.

9 Now there will probably be a lot of debate 10 among folks later on the different 11 reporting requirements and how much. But to 12 the extent that we are making clear that that 13 has to be addressed. How it gets addressed may 14 different and we have different be may 15 recommendations for it, but right now, we're 16 documenting the justification and rationale for 17 such exceptions period. And we're also making 18 clear, Erin, that your issue doesn't fall off 19 the table by making sure that we are asking 20 PHMSA to address the reporting requirements. 21 MR. DANNER: But what I'm hearing is 22 that when PHMSA addresses the concern а

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reporting requirements, they will say that this documentation does not have to be reported and I think that that's the subject that is a bone of contention here.

5 MS. BURMAN: Yes, but isn't that also another issue for another -- when we get 6 I mean isn't that what we've 7 to the reporting? 8 been focused on is that we recognize that reporting issues are going to be challenging, 9 10 but also that PHMSA is being given clear 11 direction here that operators must document and we also recognize that as a group, we have to -12 13 - PHMSA has to address the reporting issue. 14 MR. DANNER: All right. Chad? 15 MR. ZAMARIN: Yes, Chad Zamarin. Ι 16 think that's right. I think we need to focus 17 task at hand which is the Ι think the on 18 exception allowance and what that is limited 19 I do think we go down the rabbit hole of to. 20 what the appropriate amount of reporting is. Ι 21 actually think it works much better when we get 22 to the section on reporting after we've seen

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1 the totality of the rule and I mean we could go 2 down this path right now, but it is not as 3 simple as just reporting the decision making. 4 I think we need to see it in the context of how 5 make decisions, document those, but we then what actually gets reported to PHMSA and why, 6 7 on what frequency, and in what format. To me, that's a whole other -- and I think as the 8 9 Commissioner said, that's a whole other topic of discussion. I don't think we should lose 10 11 the significant requirements that are being included, that then may need to be included in 12 13 that reporting requirement, but I do think that 14 is going to require more discussion. Erin? 15 MR. DANNER: 16 MS. MURPHY: Yes, I just want to 17 sort of take a step back and recognize that the 18 committee has already voted on one sort of 19 recommendation to narrow the application of the 20 blowdown emissions mitigation research in the 21 NPRM. And this is а fairly open-ended 22 additional exception debating that we're

1 whether to recommend to PHMSA. And to me, an 2 open-ended exception like this with terms like 3 significant negative impact which is not а 4 defined term and I don't think we should try to 5 define that, but it's a pretty open-ended exception. And so without reporting, to me, 6 7 there's a real lack of accountability and a 8 concern.

9 So I hear that others don't want to 10 include that, but to me, that makes this hard 11 to support.

MR. DANNER: And I guess I would add 12 13 because we have significant rate shock in there 14 and I would think it would be very important 15 that that documentation be shared, so I've gone 16 back and forth, but I actually think we need to 17 go back to the language that we had before, 18 subject to the reporting requirements in agenda 19 item six. That's just my view. 20 Alex. 21 MR. DEWAR: Yes, on the subject, it

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may be helpful, Erin, as you said, take a step

back -- Alex Dewar from BCG, by the way -- as we take a step back on this to maybe align on what the principles are here for the reporting.

think if 4 Т I'm reading them 5 correctly, we're all in the place of qoinq forward, recognizing that the industry will be 6 7 grappling with a different set of parameters 8 and conditions and how they operate when they 9 start to bring in methane emissions abatement 10 into their practices. And so normal operating procedures may change. And I think there's a 11 12 number of benefits from reporting and from 13 understanding how those decisions are being 14 made that can both inform that rulemaking down 15 the line, but also have other ancillary types 16 of benefits for helping operators think through 17 this knowledge sharing, learning, et cetera.

So I think at this stage, it's actually hard to say -- I think we can all agree that there is benefits from reporting.
The question is how. And so if we can maybe come back to more of a principled discussion

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here and use language, as I think we did on least embed in this point one, to at as principle that reporting that valuable, can be utilized by PHMSA, by operators, et cetera. The question is under what structure that's Maybe that's a place that we can kind of done. get alignment on what's in this language here I propose.

Well, we have a number 9 MR. DANNER: 10 of different sentences here, different clauses 11 use. Ι mean again, I think Ι most to am comfortable with 12 subject to reporting 13 requirements in agenda item six just knowing 14 that we'll get to that and we'll do that. Ι 15 State Commissioner, I have the mean as а 16 ability to require any company regulated by us 17 to turn over whatever records they have and if 18 have done documentation that's required they 19 here, they have to turn it over to me.

But I also think that we should create the expectation that this documentation will be reported. So I like the subject to the

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1 reporting requirements better. That's my 2 preferred language, for what it's worth. 3 Sara? CHAIR GREEN: 4 Ι agree that the 5 subject language is helpful. I think that we do want to establish a principle of reporting 6 7 I think it's critical to, at least for here. 8 me, to agree to this exception because I do 9 feel like it is an important exception that I 10 want PHMSA's eyes on and so I would -- I'm okay 11 with that subject to the reporting 12 requirement's language, but I would really like 13 documents and reports. I think it's a fair 14 request, right? This is a narrow set of issues 15 that relates to customer and outages 16 significant rate shock. It is an exception to 17 a general program where we are agreeing, right, 18 to blowdown mitigation, emissions mitigation, 19 and I think that we should expect that there 20 would be some review requirements. 21 Let me step back, some reporting 22 requirement to justify why somebody would take

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this action. I think that's fair and
 transparent.

3	MR. DANNER: Chad?
4	MR. ZAMARIN: Yes, I think again,
5	I think that's a discussion for Section 6.
6	That is not generally the way it works within
7	the code and it's generally not all that
8	practical. I mean when we talk about what we
9	report, at least I'm think I'll foreshadow,
10	I guess if we're starting to go somewhat down
11	that rabbit role if it's required, but
12	typically, we don't send in reports of
13	justification kind of decision making that
14	occurs. Now we would report the number of
15	blowdowns that occurred, the number of when
16	we talk about reporting, I would be advocating
17	for us to report statistics. And if the
18	statistics are showing that this exception is
19	being used more than someone thinks it should,
20	then that should drive PHMSA to dig deeper.
21	But normally, that is not we don't just send
22	in reports to PHMSA. PHMSA is not staffed to

review reports that way. We try to fit that in reporting section that that so it's to generally data that can be analyzed and interpreted. And if the data is saying something that needs follow up, follow up can occur.

7 And I think that's the conversation 8 we want to get into and the section on 9 reporting is coming out of all this, what is 10 the amount of reporting we can require of 11 operators that get useful information that we think dropping 12 can then But Ι in use. а 13 requirement decision-making reporting on a 14 process is not a very practical way. And it's 15 not the way that we're really set up to measure 16 how things are being done. 17

18 MS. GOSMAN: Ι aqree that, in 19 general, when we look at documentation say in 20 program, right, what we're doing the ΙM is 21 we're documenting various actions and decisions 22 made by operators and then we look at those

MR. DANNER:

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Sara?

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through the lens of inspection, right, and then compliance and enforcement.

3 Т think here what -- this is а 4 difference that I'm proposing and I think Erin 5 is it's as well, but important for understanding this exception because we're 6 7 doing something different here, right? We are an exception for certain situations 8 creating 9 based on really societal impacts and economic 10 impacts. And I think those should properly be 11 reported to the agency. It's a narrow set of 12 issues and Ι don't think that we are 13 undermining in any way the sort of standard 14 I do think here there's system, but real 15 validity to having a different limited, right, 16 but different reporting system. 17 MR. DANNER: Peter. 18 MR. CHACE: Thank you, Pete Chace, 19 I have to agree with what Sara said. NAPSR. Ι 20 think I personally believe that we're moving

economic impact type decisions. I may go

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1	further instead of notification required and
2	that's perhaps if you get in a situation where
3	you feel the need there's the need to make
4	this exception, telephonic notice or the
5	equivalent, to get that on the map right away.
6	Again, I don't feel comfortable
7	trying to codify what I see as economic and
8	political decisions in the safety code.
9	MR. DANNER: Yes, noted. Andy?
10	MR. DRAKE: Andy Drake with
11	Enbridge. I think just needs to be
12	transparent. I don't think I don't think
13	that's in question here. I think what I hear
14	the question is is how and how quickly and how
15	often? So maybe that's to your question if
16	this is infrequent, big exceptions, this should
17	be a big deal. I don't know that we know.
18	I think the question to me seems to
19	be there's so many other notification and
20	reporting requirements that are going to come
21	out of this larger discussion, I think part of
22	us is going to have decide do we want to

reinvent that reporting vehicle a little bit to handle this new requirement?

3 Т think that we can have that 4 discussion right now or can have that we 5 discussion when get to Section 6. I'd rather 6 have it all at one time, so that we can talk 7 about how we're going to talk to PHMSA about an 8 entirely new conversation on a lot of things. That's kind of where I am. 9

10 Doing this fragmented form here is 11 not helpful because I think we're going to 12 reinvent this entire conversation about how to 13 talk about this issue, whether that's threshold 14 equipment use choices all the way down all of 15 these nine or ten sections. And I'd just as 16 soon put all those conversations together in 17 one time.

I thought that's what Commissioner Burman was proposing. We want to talk about this. We want to document it and we want to resolve reporting in Section 6 in aggregate with all the other things that we're going to

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talk about reporting because this may warrant a little bit more than just some of sort anecdotal report to PHMSA about one issue. This may three or four other tangential issues we want to tie to it in that conversation, but we haven't gotten to those sections yet. So that's just where I am anyway.

8 MR. DANNER: Well, I just wanted to 9 make sure that it's flagged here so that we're 10 not going to get to Section 6 and then forget 11 all about this. Quite frankly, if it were just me I would put in and report. I realize we 12 13 have to -- we have to do some compromises here, 14 but I don't want to lose that conversation and 15 so I'm okay leaving it to agenda item six, as 16 long as we don't lose this. Again, I'm just 17 speaking for myself here.

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All right, Sara.

MS. GOSMAN: So I think the fundamental issue is whether we think this information should be put in front of PHMSA, whether we use report or telephonic notice and

1 I think if we were to agree on that, right, and 2 then the specifics come with how we're going to 3 re-conceptualize perhaps the reporting set of issues, that's fine, right? But I think if we 4 5 delay the question about whether PHMSA should know about this and have information in front 6 7 of it, then that's where sort of I think the 8 issue is for me. So I can handle details 9 What I can't do is sort of push this later. 10 off and then at that point realize that we are 11 not going to be doing any form of reporting or 12 notification.

13 MR. DANNER: Yes, I mean the reason 14 I don't want to lose sight of this is these are 15 significant negative impacts to customers. It's 16 not going to be happening that often. This is a 17 It's kind of rare event. an it's _ _ an 18 exception and so the reporting isn't just some 19 sort of standard that's going to create a whole 20 lot of work. This is a real exception. It's a 21 rare exception, so when you have this rare 22 exception, you have reporting. So I am -- I

understand what Sara is saying. I'm trying to get something that we can all agree to and it might be that we need to have the discussion on agenda item six.

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Well, anyway, Chad.

MR. ZAMARIN: Yes, I don't disagree 6 7 that these may be rare occurrences, but I also 8 think that we have to keep it in the context of 9 what should trigger the need to report to have 10 PHMSA. And Ι think we need to that 11 discussion. We're talking about an exception where, when implemented, would be the decision 12 13 to use mitigation measures not versus usinq 14 mitigation measures.

15 There are exceptions throughout the 16 code that you can debate whether or not they're 17 equivalent in severity or importance, but there 18 are exceptions throughout the code. We don't 19 submit engineering reports or documents. We 20 document the decision-making process. Those 21 are subject to audit. On an annual basis or on 22 a periodic basis as defined in reporting, we

report information on the results of what decisions were made.

3 And I just think we need to be very 4 careful going through individual sections and 5 creating new individual reporting requirements without thinking about that in the totality. 6 7 Just because something is a rare event doesn't 8 mean we should consider it needs reporting. Ι 9 think we need to put it in the context of 10 everything else that we -- the activity that we 11 do and what does or doesn't constitute 12 something warrants a notification, a report, or 13 annual reporting information that can be 14 analyzed and then used and acted upon as 15 needed.

16 I personally think this is one that 17 fits in the camp of you have to document your decision-making process. I think when we get 18 19 to Section 6, what I think makes the most sense 20 is you have to include in the annual report 21 reporting on these blowdown events, the 22 mitigation that you take, and when you don't,

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1	and that allows for the analysis to see if the
2	right results are being achieved.
3	MR. DANNER: All right, thank you.
4	Chad Gilbert.
5	MR. GILBERT: Yes. Chad Gilbert with
6	United Association of Plumbers and Pipefitters.
7	So basically, the language we have on the board
8	says reporting requirement. So my question is
9	I mean we have to have some type of reporting
10	on the issue, so I mean all we're asking for
11	here is the reporting requirements. We're not
12	specifying what those requirements will be,
13	correct?
14	MR. DANNER: Well, my understanding
15	is that agenda item six is going to talk about
16	reporting requirements generally and not just
17	reporting requirements about these exceptions
18	here in this paragraph.
19	MR. GILBERT: Yes, I tend to agree
20	with the chair and with Erin on this particular
21	matter. Thank you.
22	MR. DANNER: All right, and Erin?

I kind of feel like 1 MS. MURPHY: 2 we've been talking about this one for a while 3 and I don't know if we're going to reach a 4 consensus, so I would move for a vote on the 5 language before us, unless there is a desire for further discussion. 6 7 MR. DANNER: All right, can I get

8 some clarification though, Erin. So you would 9 not be okay with the language that is up there 10 subject to the reporting requirements of agenda 11 item six. You would insist on document and 12 report?

MS. MURPHY: Yes. Well, I guess I
was calling a vote on the way it was phrased
which had both options in there. But yes, I
think I would prefer document and report.
MR. DANNER: Okay. Understood that

18 you prefer document and report. You would 19 object or oppose subject to the reporting 20 requirements in agenda item six?

21 MS. MURPHY: I can support that as 22 well.

1	MR. DANNER: Okay. That helps frame
2	the debate. Diane?
3	MS. BURMAN: Yes, so I think if we
4	take out and report and leave in then does
5	it just go away?
6	MR. DANNER: It did.
7	MS. BURMAN: All right. So we take
8	out so it's operate as most documents a
9	justification and rationale for such exceptions
10	subject to the reporting requirements in agenda
11	item six. And I think that marries the two.
12	MR. DANNER: Okay. It also make
13	sure that we will be having that discussion
14	when we get to agenda item six.
15	Andy?
16	MR. DRAKE: Andy Drake with
17	Enbridge. I would agree with Commissioner
18	Burman. I think we have yet to have that
19	conversation. I don't even know what reporting
20	looks like in this, for this. I'd like to at
21	least know what that is before I'm voting on
22	it. It could be quite onerous and I just want

1 to know what that is. So this helps. At least 2 it's in front of us. We're going to talk about 3 it. I'm not trying to kick the can down the road, I just want to be able to -- I just want 4 5 to know what it is I'm voting on. MR. DANNER: All right, anyone else? 6 7 Chad Gilbert, you have your hand up. Okay. 8 All right, we have language before 9 us and I see no tents, so -- what's that? 10 (Off mic comments.) 11 Т don't know that we raise that We have items 2, 3, 4 in front of us. 12 next. 13 MS. BURMAN: Let's vote on what we 14 kind of worked through before we get to 2, 3, I think it makes it easier for all of 15 and 4. 16 us to move forward on consensus items. 17 MR. DANNER: All right. Would you like to make motion? 18 19 MS. BURMAN: Sure. I'll read it. 20 I'd like to make a motion. The proposed rule, 21 as published in the Federal Register and as 22 supported by the Preliminary Regulatory Impact

1	Analysis and Draft Environmental Assessment,
2	with regard to blowdown mitigation, Section
3	192.770 is technically feasible, reasonable,
4	cost effective, and practicable if the
5	following changes are made. In addition to the
6	proposed exception for when there is a negative
7	impact on safety, as an exception for when
8	there would be a significant negative impact to
9	customers such as outages or significant rate
10	shock. Operators must document the
11	justification and rationale for such exception
12	subject to reporting requirements in agenda
13	item six. The GPAC recommends PHMSA address, as
14	appropriate, scenarios that would affect
15	customer outages.
16	MR. DANNER: All right, is there a
17	second?
18	MR. GILBERT: Second.
19	MR. DANNER: Okay, Chad Gilbert has
20	seconded. Cameron, do you want to take the
21	vote?
22	MR. SATTERTHWAITE: Okay. I'll say

1	your name and if you agree, say yes. If not,
2	say no. Diane Burman?
3	MS. BURMAN: Yes.
4	MR. SATTERTHWAITE: Peter Chace?
5	MR. CHACE: No.
6	MR. SATTERTHWAITE: David Danner?
7	MR. DANNER: Yes.
8	MR. SATTERTHWAITE: Sara Logan?
9	MS. LONGAN: Yes.
10	MR. SATTERTHWAITE: Terry Turpin?
11	MR. TURPIN: Yes.
12	MR. SATTERTHWAITE: Brian Weisker?
13	MR. WEISKER: Yes.
14	MR. SATTERTHWAITE: Andy Drake?
15	MR. DRAKE: Yes.
16	MR. SATTERTHWAITE: Alex Dewar?
17	MR. DEWAR: Yes.
18	MR. SATTERTHWAITE: Steve Squibb.
19	MR. SQUIBB: Yes.
20	MR. SATTERTHWAITE: Chad Zamarin?
21	MR. ZAMARIN: Yes.
22	MR. SATTERTHWAITE: Chad Gilbert?

1	MR. GILBERT: Yes.
2	MR. SATTERTHWAITE: Arvind
3	Ravikumar?
4	MR. RAVIKUMAR: Yes.
5	MR. SATTERTHWAITE: Erin Murphy?
6	MS. MURPHY: Yes.
7	MR. SATTERTHWAITE: Sara Gosman?
8	MS. GOSMAN: Yes.
9	MR. SATTERTHWAITE: Sam Ariaratnam?
10	MR. ARIARATNAM: Yes.
11	MR. SATTERTHWAITE: Motion carries,
12	14 to 1.
13	MR. DANNER: All right, thank you
14	very much. Now let's go to oh, it is 3:20.
15	Can we take a short break and be back at 3:30?
16	Let's be back at 3:30.
17	(Whereupon, the above-entitled
18	matter went off the record at 3:22 p.m. and
19	resumed at 3:35 p.m.)
20	MR. DANNER: All right, we are back
21	on the record. Let's come back to order,
22	please, and please take your seats.

1	Okay, we are back, and we are
2	starting our discussion. All right, thank you.
3	So we have Chairman's prerogative
4	here. We have a couple of people who have
5	flown in from quite a distance and have to
б	catch a plane and need to leave here at 4:15,
7	and they wanted to provide public comment on
8	leak surveys and patrols, so we're going to
9	suspend the conversation here for a few minutes
10	so that we can hear from Patricia Nelson and
11	Laurie Anderson on the leak survey and patrol
12	proposals.
13	So, Patricia Nelson and Laurie
14	Anderson, if you are here, could you form a
15	line on the right? And there's a microphone up
16	in front of the committee.
17	MS. ANDERSON: Thank you. My name
18	is Laurie Anderson, and I live in Broomfield,
19	Colorado. I'm in town only for today, so thank
20	you for this. I am a councilmember for the
21	City and County of Broomfield, representing
22	constituents who are impacted by large-scale

1 oil and gas developments in our communities. 2 I am also a Colorado field organizer 3 for Moms Clean Air Force, a community of over 4 1.5 million moms and dads united against air 5 pollution, including the urgent crisis of our changing climate to protect our children's 6 health. 7 8 I am here to share our broad support 9 policies that protect safety and the for 10 environment, and I call on the Gas Pipeline 11 Advisory Committee to support rapid action by 12 PHMSA to finalize strong advanced leak 13 detection standards, including expanding the 14 mileage of gas gathering lines that must be 15 leak surveyed, more frequent inspections using 16 the best available technology, and ensuring 17 quick repair of identified leaks. 18 The oil and qas industry is very

19 northern Broomfield. present in In 2017, 20 several of our well-established communities, 21 including a retirement community, were faced 22 fracking with unprecedented residential

operations and the supporting gathering and distribution lines.

3 These lines run right past schools 4 and homes in my community. This development 5 rightfully caused much angst, and protecting health and safety was clearly the top concern. 6 7 Strong federal oversight of this infrastructure 8 will ensure that every breath is clean, that 9 people that live here are safe, and the climate 10 is protected.

11 Broomfield currently funds and an enhanced air 12 quality monitoring operates 13 program to capture pollution spikes from the 14 large-scale well pads in close proximity to our 15 monitors communities, but these have 16 inadvertently discovered multiple midstream 17 pipeline leaks, which were subsequently 18 repaired once ownership was determined.

19 There are certainly more leaks like 20 these that are just waiting to be discovered. 21 However, time is of the essence since 22 undetected defects and corrosion pose the

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1 potential for catastrophic impacts such as 2 pipeline explosions, which, although rare, are 3 an inherent danger for communities like mine. By expanding reporting requirements 4 5 to ensure that all gathering pipeline mileage is reported to the National Pipeline Mapping 6 7 System, decision makers in communities can 8 better understand the physical properties and environments of this infrastructure and assess 9

11 The Colorado PUC is currently 12 considering new rules as we work diligently to 13 meet our statutorily required GHG reductions, 14 including 26 by 2025, 90 percent by 2045, below 15 2005 levels.

whether additional oversight is needed.

16 States like Colorado are following 17 the leadership of PHMSA. For example, in the 18 recent decision by the Colorado PUC, they 19 deferred enacting regulations on the advanced 20 leak detection technology program until PHMSA 21 finalized its rules.

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Regardless of which jurisdiction a

pipeline falls under, the concerns remain the same. A strong federal rule that states like Colorado can follow will provide consistency between jurisdictions.

5 Although there are many examples of 6 the devastation undetected leaks can cause, I 7 want to highlight the story of Mark and Julie 8 Nygren of Weld County, Colorado, who lost their 9 home and livelihood due to contamination from a 10 midstream pipeline leak, and four years later, 11 have not been able to return to their farm.

12 The remediation so far has created a 13 pit 20 feet deep and three acres wide to remove 14 the contamination on their property. Rural 15 residents like the Nygrens should be afforded 16 the same protections from pipeline leaks as 17 those that live in more urban locations.

And finally, beyond the climate and safety aspects of reduced leaks is another critical matter. The entire Denver Metro and North Front Range area, including my city, remains in severe ozone non-attainment due to

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our unique topography, with the Rocky Mountains that trap the pollution, heavy gas and oil development in this area, and background pollution from out-of-state resources.

5 We are now facing federal interventions if Colorado does not put forward 6 7 implementation an approvable state plan, 8 including significant reductions in ozone 9 forming pollutants. Since these pollutants 10 coexist with methane, the good news is that 11 finding and fixing pipeline leaks will help 12 reduce ozone pollution to safer levels. In 13 fact, a 2022 carbon mapper study found that 14 gathering pipelines made up 23 percent of point 15 source emissions and were the second largest 16 source of emissions, so strong regulations will 17 also help us tackle ozone.

These are just some of the examples of what we are facing. So, I thank you for your time and your diligence on developing rules that are effective in protecting health, safety, and the environment. Thank you.

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1	MR. DANNER: All right, thank you
2	very much. Okay, and again, I ask that you
3	keep your comments as brief as you can and
4	don't repeat what others have said.
5	MS. NELSON: Yes, sir, thank you.
6	Hello and good afternoon and good evening. My
7	name is Patricia. I am the daughter of Ofelia,
8	the granddaughter of Maria del Rafugio, and the
9	granddaughter of Augustina Luna. I am the
10	Colorado Fossil Fuel Just Transition Advocate
11	for GreenLatinos Colorado. As I cannot be here
12	for the whole week, thank you so much for
13	letting me skip the line today.
14	I would like to ask the committee to
15	recommend the most protective standards
16	possible for the sake of Latino communities and
17	those communities like mine that have been
18	historically and disproportionately impacted by
19	oil and gas infrastructure. These rules must
20	protect our communities and our energy workers.
21	A study published last year showed
22	that communities of color and low-income

populations experience more gas leaks. The average leak density increased by 37 percent for these communities compared by predominantly white neighborhoods, leaving our communities sicker and missing more days of school and work due to adverse health impacts caused by poor air quality.

8 We must acknowledge that the current 9 regulations do not go far enough to protect 10 communities like mine. Any time a pipeline is 11 left without repair for too long, the risk is 12 too high for a repair for a leak that is a 13 probable future hazard. We need action now.

14 I am also a member of the Colorado 15 Committee, Midstream Steering а technical 16 working group tasked with reducing emissions 17 statewide from fuel combusting equipment along 18 the midstream. I have worked with some of the 19 largest operators in Colorado, and they agree 20 that not only can this be done, but it is 21 necessary.

Industry people constantly talk

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1 about how their operations are the safest and 2 they use the best technology available, but at 3 the same time, we are still hearing the excuses about costs or feasibility. It's 2023, and we 4 5 have the technology available. Owners and operators of these companies that do methane 6 7 mitigation are standing by and ready to work.

8 Methane mitigation is an opportunity 9 for the fossil fuel industry to finally be the 10 good neighbor that they said they were going to 11 be, an effective protect way to our 12 communities. These jobs available require 13 most fossil skills and expertise that fuel 14 workers already have.

15 With an average salary ten percent 16 higher than the national average and some 17 starting salaries at \$140,000 a year, we can 18 help ensure that current energy workers are not 19 behind in our left pursuit for а just 20 transition. I have family members and friends 21 that rely on this industry for work. They 22 deserve to have a safe place to work.

I was born and raised in Weld County in northeastern Colorado. We are the topproducing oil and gas county in the state, and some days, in the nation. We have the poor air quality to prove it. The proposed rule will directly impact how my community will survive the bust after the boom.

like to end my public 8 Т would 9 comment with a reminder to the committee of 10 PHMSA's mission and purpose. PHMSA's mission -11 - excuse me. PHMSA's mission is to protect 12 people, not an operator's bottom line, and the 13 environment by advancing safe transportation of 14 energy and other hazardous materials. These 15 essential for our daily lives, but are our 16 communities need to come first. Thank you so 17 much for your time.

18 MR. DANNER: Thank you very much, 19 and safe travels home. All right, we have one 20 more public comment, this one from Alaska, so 21 also with a plane to catch.

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MS. EPSTEIN: Yes, thank you very

much to the Chair and to the committee. I will be leaving this evening. Good afternoon, my name is Lois Epstein, and I am a licensed professional engineer in Alaska and President of LNE Engineering and Policy, a consulting firm that includes extensive work on Arctic oil and gas issues.

8 I am a former member for 12 years of 9 the Liquid Pipeline Advisory Committee, and I 10 currently serve as a Board Member of the 11 Pipeline Safety Trust. My comment is provided 12 as a member of the public.

13 understand that part of Ι this 14 committee's agenda focuses on North Slope leak 15 detection, an Alaska-specific issue. Ι understand that there has been a request by 16 17 industry that North Slope operators only 18 utilize advanced leak detection one time per 19 year because advanced leak detection does not 20 work as well at, quote-unquote, extreme 21 temperatures.

Because the North Slope does not

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have extreme temperatures from late spring until early fall, I oppose this request and recommend that the final rule include leak detection two times per year, likely during May and October, which are five months apart. Temperatures during those months are not in the extreme range.

8 The average North Slope Borough 9 temperature in May is a low of 23 and a high of 33 Fahrenheit, and in October, there is a low 10 11 of 15 and a high of 25 Fahrenheit. It is 12 particularly important to utilize advanced leak 13 detection as possible after soon as winter 14 because the season's harsh conditions could 15 result in new, significant methane leaks.

16 I do not know the low temperature 17 threshold for effective advanced leak 18 detection. I'm sure someone in this room knows 19 But it's also possible that effective that. advanced leak detection could occur during late 20 21 April and early November in the Arctic. Ι 22 the committee to explore the encourage

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effectiveness of advanced leak detection at the temperatures typically present the North on Slope during those months.

recommendation to GPAC is 4 that Μv 5 the committee ensure that leak detection on the North Slope occurred twice each year, not once, 6 7 as that approach is not justified given Arctic 8 temperatures, which only are getting warmer 9 each year. This year, for example, the North 10 Slope near Prudhoe Bay is expected to be 10 11 degrees Fahrenheit above normal from November 1 through 26, and that's a chart I saw today. 12

13 Last, I encourage PHMSA to have all 14 meetings available virtually. committee In 15 addition to potentially increasing the 16 audience, doing so would reduce greenhouse gas 17 emissions from some of those who now travel to 18 D.C. to attend. Thank you very much for your 19 consideration of these comments.

20 MR. DANNER: All right, thank you 21 very much, and safe travels home. Okay, we are 22 going to go back to our discussion here, the

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1 voting slide in front of us. We have three 2 more items. You can read them yourselves in 3 front of you, and I would just open it up to 4 the floor. What do we want to include of these 5 in our final recommendations? Any -- all right, let me put it this 6 These will be included unless --7 way. 8 MS. BURMAN: So, looking at --9 Oh, okay, Diane? MR. DANNER: 10 MS. BURMAN: Looking at bullet one, 11 which was, I think, old bullet three, if I -just to level set us, I think I remember sole 12 13 use of flaring is limited to when the other 14 options are impractical, unsafe, or result in 15 lower emissions abatement. I think this was 16 language that we collaborated around. 17 don't know that Ι we resolved 18 issues, but just kind of taking a pulse, if 19 everybody has any other language to add to that 20 bullet, does it satisfy some of the concerns, 21 does it not? Where were we left, I think, is -22

1	MR. DANNER: Thank you, and I have
2	to say I am fine with this language. We did
3	have some discussion on it, and we added some
4	language to it, and I think it covers the
5	ground. Sara?
6	MS. GOSMAN: Yes, thank you. I
7	think that I want to narrow this issue as much
8	as possible. I want to be clear that I'm not
9	against flaring generally as a methodology
10	here, nor am I certainly against any technology
11	improvements, right, in this area. And I don't
12	want this particular provision to imply that
13	GPAC as a whole is.
14	I think the interest that I had was
15	in just making sure that if an operator is only
16	going to use flaring, right, that we have some
17	standard that says look, you considered these
18	other methodologies and you chose to use
19	flaring in this particular context because of
20	good reasons, right.
21	And the good reasons I can think
22	about are these other methodologies are

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impractical, or unsafe, or actually flaring would do better for climate. So, that was the sort of rationale behind this, and again, I want to be as limited as possible here in this because I do view it as a very narrow exception.

7 All right. MR. DANNER: Chad? 8 MR. ZAMARIN: Yeah, I don't think 9 very far off conceptually, but we're Ι do 10 worry, as I mentioned, about -- I think we want 11 to create performance expectations and not pick Because, as we discussed, you know, 12 solutions. 13 there are companies out there that are working 14 on combustion technologies that, you know, this 15 is not production flaring where we have flares 16 that are flaring for months at а time, 17 sometimes years at a time, which I think is 18 where flaring has become a real problem. 19 for, you know, Ιt allows certain

20 activities that could be maybe handled differently, but, you know, I would hate to see 21 22 should stop that kind say that we of us

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investment and technology development where, you know, that kind of tech --

3	I mean, some of the solutions that
4	are proposed here, they require much longer
5	outages, much longer reductions in throughput,
6	and again, I don't know if you can specify by
7	just saying in a lower emissions abatement or
8	if I like the comments that you just made.
9	I think we have the same intent. I mean, the
10	way I want to think about it is that we have
11	all of these tools to use.
12	Ideally, we're setting performance
13	expectations, and the best tool should win no
14	matter what, you know, which one it is, or a
15	combination of tools. And so I just always get
16	concerned when we pick specific technologies in
17	a regulation versus establishing standards.
18	And so, I don't, I still don't like
19	calling out one specific technology as being
~ ~	
20	inferior when we could say the expectations of

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any technology should be this, and if it

doesn't meet that, then maybe you have to use

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something else. I don't know how you address
 that.

3	MR. DANNER: Thank you. Andy Drake?
4	MR. DRAKE: Andy Drake with
5	Enbridge. I appreciate two particular points
6	of this proposal that you put up there, and
7	that is one sole. The word sole is important
8	because we use this and it's absolutely
9	critical in combination with other venues.
10	If we get down to a low enough
11	pressure, we have to get rid of the gas
12	somehow. We can't keep pulling it down to
13	zero, so we have to get rid of it somehow.
14	That's flaring oftentimes is the best way to
15	do that environmentally and physically.
16	And the last piece I really
17	appreciate, to Chad's point, result in a lower
18	emissions abatement, let's keep our eye on the
19	bigger prize. You know, we're not talking
20	about production flaring where the flares stay
21	on, and on, and on, and on, and on.
22	No, this is an activity that happens

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specifically, very locally for very а verv specific amount of time, and then looking at this in that context, and trying to keep open to technologies ourselves that actually environmental footprint lower is the right thing to be looking at.

And I understand the emotion around 7 8 flaring, but we have to translate it into this 9 application and look at it in that lens, and I 10 think you may find, and I think you will find, 11 that there are situations where flaring is the 12 right answer to do for the environment, and I 13 don't want to have that put upside down where 14 people are being discouraged from doing that. 15 I think that won't serve anybody here. That 16 doesn't give everybody a free mean we pass 17 either. That's not the point. 18 MR. DANNER: Sara? 19 MS. GOSMAN: Thank you. And just, I

20 mean, in terms of time, I know we've spent a 21 fair amount of time so far on these issues. I 22 don't want to, you know, just have a longer

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discussion here.

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2	I guess a couple of thoughts I have,
3	number one is we could put in that first
4	sentence that we don't intend to have this
5	particular provision be one that limits
6	technology advancement in any way. We can also
7	have this be solely about emissions abatement,
8	right? Which one is the best one for emissions
9	abatement and we hold it there. I think both
10	of those things are fine with me.
11	I think, again, my interest here is
12	in trying to sort of take a very narrow set of
13	issues and make sure that we are thinking about
14	those in the context of methodologies, because
15	we don't otherwise have a set of criteria about
16	choosing these, right? There's nothing in the
17	proposed regulation that I see other than sort
18	of the end goal of prevention and minimization.
19	So, if either one of those I can
20	share. I can give particular language if
21	that's helpful, but I just want to see whether
22	that addresses the concerns that my colleagues
-	

have raised.

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2	MR. DANNER: Thank you. If you have
3	language prepared, I think it would be fine to
4	share that. Chad?
5	MR. ZAMARIN: Yeah, and I just want
6	to again, I think we're in agreement, but I
7	think getting it right does matter, so I think
8	the language would be good. But just for
9	example, I mean, we are working on solutions
10	across the energy ecosystem that would take
11	combustion technologies and create zero
12	emissions outputs, right?
13	And so, I mean, there could be a day
14	where the very best solution for I think
15	when you say flaring, it's going to imply a
16	very specific type of flaring application, but
17	there could very well be technologies that are
18	developed that use combustion, and flares
19	capture the CO2 emissions and create a zero
20	emission solution.
21	I mean, those are the kinds of
22	investments in this space that are happening,

1	and so that's, again, why I just worry about
2	creating this space for the kind of innovation
3	and technology selection that makes the most
4	sense for the application that you're trying to
5	solve for. And I don't I guess we'll just
б	see if there's language that may help us do
7	that.
8	MR. DANNER: So, do you have
9	language you would want to share right now?
10	MS. GOSMAN: All right, let me see
11	if I can do this. Okay, so
12	MR. DANNER: Okay.
13	MS. GOSMAN: So, you know, this is
14	sort of unusual. We don't usually have
15	language like this, but I guess I want to try
16	something like, GPAC does not intend for this
17	recommendation to limit technology advancement
18	in this area, period. And then I think that
19	would go to the end of that first sentence. We
20	yeah, I think that's where I want to stop
21	and see if that's sufficient.
22	MR. DANNER: Any thoughts?

1 Open to friendly MS. GOSMAN: 2 amendments.

3 MS. BURMAN: So, I think that's a 4 really good start. I think that I would like 5 to add to that something to the extent of, GPAC supports the need for continued research and 6 7 development to create opportunities for 8 technologies that will help further advance, 9 you know, or something like that, so that it's 10 actually a positive of, like, we are actually 11 encouraging that use.

12 MR. DANNER: Is that something that 13 would end up in a rule, just a statement of our 14 position?

15 Well, one, I think it's MS. BURMAN: 16 aligned with PHMSA's, you know, support of 17 advanced research and development with 18 technologies, so it's clear, but I think it's 19 important that it's not just about blocking. 20 It's about actually supporting that, you know, 21 doing that. I don't know how else to say it. 22 MR. DANNER: All right, thank you.

And Sara Gosman, do you have any issues with 1 2 that language being included? 3 MS. GOSMAN: No, thank you very much for that language. 4 5 All right, anyone else MR. DANNER: weigh in 6 this? All right, want to on 7 Commissioner Burman, do you want to vote on 8 this now or do you want to --9 Yeah, if we could --MS. BURMAN: -- think we can finish 10 MR. DANNER: 11 the other two --12 (Simultaneous speaking.) 13 MS. BURMAN: Unless we hear anyone 14 else having language concerns, I think voting 15 on that as a separate item, I think it, you 16 know, I think it's good, so. 17 MR. DANNER: All right, then I would 18 entertain a motion, and whoever makes the 19 motion would need to read the top down to the 20 bottom of paragraph one. 21 MS. GOSMAN: We have our research 22 and development guy.

1	MR. RAVIKUMAR: All right, yeah.
2	The proposed rule, as published in the Federal
3	Register, and as supported by the preliminary
4	regulatory impact analysis and draft
5	environmental assessment with regard to
6	blowdown mitigation, Section 192.770, is
7	technically feasible, reasonable, cost-
8	effective, and practicable if the following
9	changes are made:
10	Sole use of flaring is limited to
11	when the other options are impractical, unsafe,
12	or result in lower emissions abatement. GPAC
13	supports continued research and development to
14	advance technology, and does not intend for
15	this recommendation to limit technological
16	advancement in this area. Is there a second?
17	MS. LONGAN: Sara Longan, second.
18	MR. DANNER: Arvind Ravikumar has
19	made the motion, and I'm sorry, I missed who
20	seconded.
21	MS. LONGAN: Sara Longan, second.
22	MR. DANNER: Sara, okay, Sara Longan

1	seconded. And so, Cameron, can you count the
2	votes?
3	MR. SATTERTHWAITE: All right, I
4	will say your name, and if you agree with the
5	motion, you say yes, if not, you can say no.
6	Diane Burman?
7	MS. BURMAN: Yes.
8	MR. SATTERTHWAITE: Peter Chace?
9	MR. CHACE: Yes.
10	MR. SATTERTHWAITE: David Danner?
11	MR. DANNER: Yes.
12	MR. SATTERTHWAITE: Sara Longan?
13	MS. LONGAN: Yes.
14	MR. SATTERTHWAITE: Terry Turpin?
15	MR. TURPIN: Yes.
16	MR. SATTERTHWAITE: Brian Weisker?
17	MR. WEISKER: Yes.
18	MR. SATTERTHWAITE: Andy Drake?
19	MR. DRAKE: Yes.
20	MR. SATTERTHWAITE: Alex Dewar?
21	MR. DEWAR: Yes.
22	MR. SATTERTHWAITE: Steve Squibb?

1	MR. SQUIBB: Yes.
2	MR. SATTERTHWAITE: Chad Zamarin?
3	MR. ZAMARIN: Yes.
4	MR. SATTERTHWAITE: Chad Gilbert?
5	MR. GILBERT: Yes.
б	MR. SATTERTHWAITE: Arvind
7	Ravikumar?
8	MR. RAVIKUMAR: Yes.
9	MR. SATTERTHWAITE: Erin Murphy?
10	MR. MURPHY: Yes.
11	MR. SATTERTHWAITE: Sara Gosman?
12	MS. GOSMAN: Yes.
13	MR. SATTERTHWAITE: Sam Ariaratnam?
14	MR. ARIARATNAM: Yes.
15	MR. SATTERTHWAITE: It is unanimous.
16	The motion carries.
17	MR. DANNER: All right, thank you
18	very much. Now we've got two more to consider
19	this afternoon. One is about reporting
20	emissions for each blowdown. Anyone want to
21	start the discussion here? Andy Drake?
22	MR. DRAKE: My proposal would be

1 that we have this discussion in section six and 2 kind of talk about that a little bit, so my 3 recommendation is to take this away from the 4 current voting and just carry this on in 5 section six as a cohesive conversation. All right, Sara Gosman, 6 MR. DANNER: 7 you had your card up? 8 MS. GOSMAN: I'll actually defer to Arvind --9 10 MR. DANNER: Okay. 11 MS. GOSMAN: -- and then I'll share my thoughts. 12 13 MR. DANNER: Arvind? 14 MR. RAVIKUMAR: Point of 15 there a difference between clarification, is 16 report emissions report estimated versus 17 volume? That is, from a technical perspective, 18 that seems the same thing to me. 19 MR. ZAMARIN: I think what it --20 sorry, this is Chad Zamarin. I think what it is 21 means the estimated volume without 22 mitigation and then the actual emissions. Ι

1 would assume that's what it means, but maybe 2 PHMSA can clarify? 3 Because I do think that's something that we probably, when we get to the reporting 4 5 discussion, I think we want to calculate what the emissions would have been with the absence 6 7 of mitigation, but then also report what they 8 actually were with mitigation. 9 MR. DANNER: All right, Alex? 10 MR. DEWAR: Yeah, no, I support the 11 motion to, I don't know, to table or whatnot, 12 but to discuss it later. I think there was a 13 great discussion earlier around overall target 14 setting for this that is probably better had in 15 a larger context about reporting because I'd 16 like to pick up that point again that, Arvind, 17 you raised it earlier, but useful to have it in 18 a more kind of holistic way. 19 Okay, Brian, did you MR. DANNER: 20 agree? MR. WEISKER: I did. I think the 21 22 estimated volume, like you mentioned, because

1 earlier, this related to item number one, and 2 when we started, item number one had a million 3 cubic feet, and so I think that reported to, 4 vou know, if it's a million cubic feet or 5 greater, what was the estimated volume that we -- of the segment, and then what was the actual 6 7 emission, was what this was intended for, but I 8 totally agree this should be in section six. 9 MR. DANNER: All right, Arvind and 10 then Sara? 11 MR. RAVIKUMAR: Yes, so I want to 12 emphasize that reporting the emissions on 13 volume, both mitigated and the baseline, is 14 really important because a lot of discussion 15 earlier this morning, and we see that every 16 time we do research on this, is that the 17 biggest challenge to having any numerical 18 targets is the availability of good data on all 19 of these emissions. 20 And so, to be able to take advantage 21 of all the new technologies, all the potential 22 mitigation options that will be available in

the near future, we have to make sure that we get better data as we develop these rules as well.

4 So, one of the things I would be 5 comfortable with is having a line here that 6 says, you know, GPAC recommends that operators 7 emissions for each blowdown report and 8 estimated volume of blowdown segments subject 9 reporting requirements in whatever that to 10 section is.

11 MR. DANNER: So, basically what 12 you're saying is operators would be required to 13 emissions for each blowdown report and 14 estimated volume of the blowdown segment 15 subject to the requirements in agenda item six? 16 MR. RAVIKUMAR: Yes, to, sorry, to 17 be able to discuss the reporting requirements 18 in that section. 19 MR. DANNER: Erin? Oh, I'm sorry, 20 Sara and then Erin?

21 MS. GOSMAN: Yes, so I like the 22 subject to section six language. I'm also,

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1 frankly, fine with pushing this to the full 2 discussion of reporting later that we are going 3 to have, again, in the interests of time. Okay, so then you would 4 MR. DANNER: concur with Andy Drake then? We simply set 5 this one aside for now? 6 7 I would, yes. MS. GOSMAN: 8 MR. DANNER: Okay, Erin? 9 MR. MURPHY: I just want to -- Erin 10 Murphy with EDF. I want to elevate a concern 11 that I think there are a lot of components of 12 the NPRM where, you know, PHMSA is directing 13 operators to employ work practices and 14 technologies that might be for new some 15 operators. 16 Other operators, you know, who have 17 been sort of leading and pushing ahead might be 18 more familiar with them, but that reporting and 19 transparency and accountability is so crucial 20 to understanding, you know, how implementation 21 of these standards is going, and to really 22 ensure that PHMSA is able to, you know, take a

1 look back in the years to come and think about 2 how to evaluate future improvements. 3 There's been so much discussion specifically about this, you know, 4 today, 5 operations maintenance and venting section that there is -- this is kind of new, right? 6 And 7 so, if there is not good reporting, if there's 8 not good information and data as Arvind just 9 said, it makes it really hard to think about, 10 you know, how is implementation going and what 11 does improvement look like. 12 So, I hear folks wanting to sort of 13 push discussion, but I think there could be a 14 number of really key reporting elements, and if 15 just push everything to the end, I'm we а 16 little concerned that we're not going to fully 17 explore them. 18 So, one recommendation I might make 19 is that we sort of start a side list of some

20 sort of all of these different reporting pieces 21 that are being discussed and make sure that 22 they're all sort of listed on the agenda for

1 when we get to item six. 2 MR. DANNER: Okay, Diane? 3 MS. BURMAN: Yeah, I think putting 4 this off without forgetting about it is 5 important, and I do think that that list is sort of already being compiled by PHMSA, but 6 7 also this language itself should be captured so 8 that we can make sure that it stays there, so I 9 support moving this. 10 MR. DANNER: All right, Andy? 11 MR. DEWAR: Andy Drake with 12 Enbridge. I agree with Erin. I think we need 13 to keep track of these conversations. I don't 14 -- I want to be very clear. My intent is not 15 to kick the can down the road on the formatting 16 of reporting. I think we need to reinvent the 17 reporting conversation. 18 We need to rethink in the context of 19 not just trying to make the existing tools work

new construct with new tools in that bag to

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because they might not, and I think we need to

bring a fulsome conversation to reporting and a

solve this problem, because this is a different problem than what the existing reporting formats were brought to bear.

So, that's really my intent, but I 4 5 Let's keep track of them, bring it into agree. 6 that conversation and rethink the formatting of 7 how we do reporting all together. It doesn't 8 have to just be annual reporting and then a 9 detailed incident report. There could be other 10 tools we create here for the purpose of moving 11 the ball on this.

MR. DANNER: So, what I hear is some people say let's just set this aside and keep track of it. Others are saying we need a motion to include this as a recommendation. So, I heard wrong?

MS. BURMAN: We don't need a motion. There was not a motion on the table. It's just we're just deciding this area is going to be moved. So, if no one makes a motion, we're moving on anyway.

MR. DANNER: Okay, that -- I just --

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1	what I thought I heard you say, Commissioner,
2	was that you wanted us to move on this item,
3	so, okay. So, I am hearing a consensus that we
4	will take note of this, set it aside for now,
5	and come back to it when we get to agenda item
6	six. Is everyone in agreement? Anyone not in
7	agreement? Okay, so the last one we
8	have here: Strike the language in 192.770(c),
9	requiring documentation of the methodology for
10	choosing the mitigation method. I can't
11	remember who proposed this. Brian, I think
12	this is yours.
13	MR. WEISKER: Brian Weisker, Duke
14	Energy. This was mine and I like it as it is.
15	MR. DANNER: Any other thoughts?
16	Sara?
17	MS. GOSMAN: Soul of brevity. All
18	right, so I will also try to be brief. I think
19	the documentation for some of the reasons that
20	we've been talking about in relation to
21	reporting is really critical to understanding
22	the decision making by operators, here. And I

1 don't envision it as an onerous requirement, 2 but it does allow for something on paper that 3 tells us why the methodology, this particular methodology or combination of methodologies was 4 5 chosen. And for that reason, I would oppose this. 6 7 All right, MR. DANNER: other 8 thoughts? Brian? 9 Brian MR. WEISKER: Ι just _ _

Weisker, Duke Energy. Sorry, I keep screwing that up. I just think, you know, we've already went over and reviewed the idea of let's document what we do, and then I think we'll be getting the documenting the volumes, and then we'll be getting to reporting on those volumes.

But the methodology of decision making and documenting that time, and time, and time again, I think it just doesn't make sense to me when we're doing these. You know, we're making a decision, implementing it, reducing emissions. I just think this is unnecessary and burdensome.

1	MR. DANNER: Well, let me ask you,
2	if we were actually to get to have this
3	language in, it doesn't talk about
4	justification for the methodology chosen. It
5	also requires identification of the methodology
6	used, and if this goes into effect, then you
7	would not need to identify the methodology
8	used. Is that what you intended?
9	MR. WEISKER: I intended so the
10	way it was written is describing how the
11	methodology minimizes the release. We've
12	already defined several of what, of the items
13	that you know, we've made a laundry list of
14	items that will minimize release. Reiterating
15	the how every time we pick an option, it just
16	seems to me, is redundant and doesn't
17	necessarily make sense.
18	MR. DANNER: Andy and Chad, I don't
19	know which one of you was first, so flip a
20	coin. Andy?
21	MR. ZAMARIN: Age before sorry.
22	MR. DRAKE: Don't say it. That's

not going to win you anything. Andy Drake with Enbridge. I have a hard time with it as it's written right now because we talked so much about documentation. I think I would have to ask for clarification.

I know, Brian, you're supportive of 6 7 some documentation. I'm quite certain of that, 8 SO maybe you could help articulate what 9 documentation that you think is required in 10 association with this language up here, because 11 I don't want to turn this into binaries, like, 12 all or none.

I know we've all been talking for all day about we're going to document the basis for decisions, so there's some documentation that we're going to require. Can you help differentiate what we are -- what you see that we would be requiring?

19MR. WEISKER: I'm not sure exactly -20- oh, sorry, Brian Weisker, Duke Energy.

21 MR. DANNER: Go right ahead. Thank 22 you.

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1	MR. WEISKER: I'm not sure, as I
2	read the language, you know, what is what
3	will be the requirement of each? The concern
4	would be do each time that we do, let's say
5	we do a mitigating factor, do we have to
6	analyze all six each time, document all six,
7	what the equivalency of each six, all six would
8	be, and choosing the minimum, whatever is the
9	minimum one, no matter what other option, what
10	other alternatives may exist? So, that's the
11	major concern with this as written.
12	MR. DANNER: Thank you. All right,
13	Chad, Erin, Peter, and Arvind in that order.
14	Chad?
15	MR. ZAMARIN: Chad Zamarin with
16	Williams. I think, going back to my
17	discussion, I think I can get comfortable with
18	this language. I think it's important. I
19	believe in us documenting what we do and why we
20	do it. I think a different discussion when we
21	talk about what we report, as I mentioned.
22	Now, I don't know if it's, if it

1 makes better sense to just make this, you know, 2 document and justify that must the we 3 methodologies used in paragraph A full-stop, 4 and not be as specific or make it easier, but I 5 think should think we need to _ _ Т we be comfortable with documenting 6 how we're 7 complying with this section and applying this 8 section in our operations, and so I'm 9 supportive of the concept of documentation. 10 Could the language be improved? 11 Maybe, but -- and if so, my recommendation would be simplifying and just saying you have 12 13 to document the methodology -- you have to

14 document and justify the methodology used in 15 paragraph A, but, again, I think I can get comfortable. 16

17 All right, thank you MR. DANNER: 18 very much. Erin?

19 MR. MURPHY: Yeah, Ι support the 20 language in the NPRM and don't see a need for 21 the committee to recommend any changes. 22

MR. DANNER: All right, thank you.

Peter?

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2	MR. CHACE: Pete Chace, NAPSR. As a
3	if I was performing a pipeline safety
4	inspection and I was checking for compliance
5	with this code section, I would read the
6	company's procedures, I would look at their
7	documentation on what they did and make sure
8	that their actions complied with their
9	procedures.
10	So, I do have to agree. I'm not
11	sure justifying the methodology chosen for each
12	job really makes, provides much that's useful.
13	I think it's just essentially a statement that
14	yes, we followed our procedures, and here is a
15	couple pieces of paper describing how we did
16	it. If they're following their procedures,
17	that should already be clear, so
18	MR. DANNER: But insofar as they
19	would have some discretion on what methodology
20	to use, wouldn't you want them to identify the
21	methodology that they use?
22	MR. CHACE: Oh, certainly, yes, they

1 should identify the methodology, but I don't --2 describe how the methodologies to to me, 3 minimize the release of gas to the environment, 4 should be something captured in that the 5 company procedures. Т -- I'd like to 6 don't. know the 7 methodology they chose, but I'm not sure Ι 8 would need a justification of every single job, 9 why I picked the methodology described in my 10 procedures as an adequate methodology. MR. DANNER: All right, thank you 11 12 very much. Arvind? 13 MR. RAVIKUMAR: Yes, Arvind 14 Ravikumar, University of Texas. I don't know why I've never said that before. I support 15 16 Chad's comments saying that you know, _ _ 17 modifying this to operators must document and 18 justify the methodologies used in paragraph A. 19 The second part on how it minimizes 20 release of gas, that's taken care of by our 21 official discussion on reporting requirements. 22 If you're reporting estimated emissions and

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MR. DANNER: All right, what would 4 5 you see as necessary to, for justification, identifying the methodology and saying 6 just this is what it will achieve? 7 8 MR. RAVIKUMAR: Identifying the 9 methodology and why that was the best possible 10 method in that situation. So, there are four 11 or five different options, plus an additional 12 alternative technology option, why they chose 13 that particular one as opposed to the others. 14 I think that's what Chad was referring to, but 15 he can clarify as well. All right, thank you 16 MR. DANNER: 17 Diane, then Sara, then Brian? very much. 18 MS. BURMAN: Thank you. So, I quess 19 I look at this a little bit like when my kids 20 had to do new math and they would get credit 21 for the answer, but they had to also show all 22 of their work. And it always seemed like they

minimization of whatever amount of gas is estimated.

emissions mitigated, that should give you the

kept not doing well because the methodology they used was a different one than the teacher thought that they should use.

4 So, in looking at that and trying to understand what are we trying to accomplish, I 5 6 can understand the need to document why they 7 didn't use something, and if necessary, to then 8 explain, you know, further. I'm just trying to 9 understand if this makes sense to go down the 10 rabbit hole of having, and I'm undecided, but 11 having to document the methodologies always used versus --12

13 it's coming back to what's Again, 14 PHMSA going to do with this, and I worry that 15 it's going to chill and lead a little bit to 16 some second guessing. So I wonder if there's 17 dealing with the need for way of some documentation, but with some flexibility built 18 19 in there. 20 MR. DANNER: All right, thank you.

21 Sara?

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MS. GOSMAN: Sara Gosman. I

introduced myself. Okay, so I'm just -- maybe I want to step back a little bit because I want to look at the language that's actually proposed. So, the language that is proposed is 4 operators must document the methodologies used in paragraph A of this section, and describe how the methodologies minimized the release of gas to the environment.

9 see there is So, what Ι the 10 documentation of which one of these options or 11 combination of these options is used, and then, 12 well, describing how effective that as was, 13 right? What was the result here? So, I wanted 14 to check my interpretation with PHMSA to make 15 sure that's their understanding too.

16 That is -- I don't see a requirement 17 here actually for justification of a particular 18 methodology. I think that would be a great 19 idea, right, but it's not -- I don't see it in 20 the text of the NPRM.

21 MR. DANNER: Yes, so it's not а 22 defense of. It's an explanation of what it

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does.

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2	MS. GOSMAN: Okay, so PHMSA says
3	yes, so I guess, I mean, if we stick with the
4	language in the NPRM right now, what I
5	understand operators are required to do is
6	document the options that they took and also
7	describe how they minimized the release of gas
8	to the environment. So, that seems like your
9	concern here is actually something that isn't
10	in the requirement as of now.
11	MR. DANNER: All right, thank you.
12	Brian?
13	MR. WEISKER: Brian Weisker, Duke
14	Energy. After listening to Peter and thank
15	you Sara, as well, I think where I would
16	clarify is if we would say that operators must
17	document in their procedures the methodologies
18	that they use.
19	So, we would describe within our
20	procedures the methodologies that we use, and
21	then I think that would clear it up for me,

1 document in our procedures, like you mentioned, 2 Peter, that that would be something that you 3 would use as an audit when you went out and audited an operator, and then we would document 4 5 followed this procedure. whenever we We'd document this as the procedure or the process 6 7 that we used, and document it as we described 8 earlier. All right, thank you. 9 MR. DANNER: 10 Alex, did you -- Diane Burman? 11 MS. BURMAN: Yeah, I liked Sara, you know, kind of getting under the hood of what 12 13 are we trying to accomplish, and I don't think 14 intended to be broad for it's single every 15 thing, having to document. 16 So, I wonder if there's, taking sort 17 of Brian's friendly amendment to his language, 18 if there's some way that it mirrors back to, 19 Sara, what you were saying in trying to get to

accomplish?

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the heart of what is actually the -- why we're

trying to get to this. What are we trying to

1	MR. DANNER: Thank you. Erin?
2	MR. MURPHY: Erin Murphy, EDF. I
3	appreciate the amendment that Brian just
4	proposed. As I'm, you know, looking at the
5	language of this section, one thing that jumped
6	out to me that we haven't discussed yet is, in
7	192.770(a)(6), there's the alternative method
8	pathway.
9	And the way part C, which is the
10	requirement for operators to document the
11	methodologies is phrased in the NPRM actually
12	only references that, you know, list of options
13	in paragraph A. Oh, sorry, I'm learning as I
14	read here and realizing that six is a subpart
15	of A. I think I'm tired at the end of the day.
16	What I was getting at is a concern
17	that the phrasing in the NPRM did not encompass
18	the choice to go with the alternative pathway,
19	but now I realize that it does, so I think
20	that's great. Good job, PHMSA, but, yeah, I am
21	comfortable with what Brian proposed for the
22	documentation and procedures.

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1 and for MR. DANNER: Okay, _ _ 2 Sayler, do you need Brian to his repeat 3 proposal? 4 MR. PALABRICA: We tried it and we 5 if Brian were qoinq to see can read the 6 language we put up? 7 MR. DANNER: Brian, does that look familiar? 8 9 Brian Weisker, MR. WEISKER: Duke 10 Energy. Yes. 11 MR. DANNER: Okay, Chad, you had 12 your card up? All right, there are no more 13 cards up, and bad news, Erin, it's not near the 14 end of the day, but we will push on. Is there 15 anyone who opposes this language? All right, 16 is there anyone who would like to move that we 17 adopt this language? 18 MR. WEISKER: I guess I might. 19 MR. DANNER: Brian? 20 WEISKER: Brian Weisker, MR. Duke 21 Energy. The proposed rule, as published in the 22 Federal Register and as supported by the

1 preliminary regulatory impact analysis and 2 draft environmental assessment, with regard to 3 blowdown mitigation, is technically feasible, reasonable, cost-effective, and practicable if 4 5 the following changes are made, one, revise Section 192.77(c) to specify that 6 operators 7 in their procedures the methodology document 8 for choosing mitigation methods.

9 Is there a second? MR. DANNER: 10 MS. GOSMAN: Oh, not a second. Ι 11 apologize. I know this is out of turn, but can I -- Brian, can I just quickly ask a clarifying 12 13 Is this language meant to replace C, question? 14 it to clarify the is meant language in or 15 relation to methodology?

16 Because there is that minimizing the release, explaining that, that I think should 17 18 stay in C, so I'm just wanting to make sure 19 that's your understanding, that's that the 20 committee's understanding of this proposal. 21 Otherwise, we're voting on two different 22 things.

1 Brian Weisker, MR. WEISKER: Duke 2 I was thinking this would replace that Energy. 3 section. 4 MR. So, all right, DANNER: the 5 language here is revised, which could be read 6 as edit or amend to, so I think we need to 7 clarify this as replace the language in, but we 8 have a motion now standing. 9 So, where are folks? Sara, where 10 are you? If this is a replacement of 770(c), 11 is that a different thing that if this is additional, or could it be additional? 12 Is it 13 consistent? 14 MS. GOSMAN: So, if documenting in 15 their procedures the methodology for choosing 16 mitigation methods includes looking at the 17 environmental impact, here, the emissions, that 18 piece of what was there, I think I'm fine with 19 it. 20 MR. DANNER: All right, does anyone 21 else have a comment? Erin? 22 MR. MURPHY: I wonder if I could

1 offer a friendly amendment to clarify that. 2 in their So, document procedures the 3 methodology for choosing mitigation methods, 4 including evaluation of environmental comma, 5 impacts. MR. DANNER: Brian, would that be 6 7 acceptable to you? Is someone typing that 8 MR. WEISKER: 9 up there? Excuse me, Brian Weisker, Duke 10 There it is. I can accept that. Energy. 11 MR. DANNER: Okay, that friendly 12 amendment has been accepted. This changes the 13 motion, and, John, I don't know if we need to 14 read this again or if the record has captured this. 15 16 PARTICIPANT: Sara has a question. 17 MR. DANNER: Oh, Sara Longan? 18 MS. LONGAN: Mr. Chairman, I know 19 we're trying to be productive, and I appreciate 20 that, but to me, adding including evaluating of 21 environmental impacts, I support the notion, 22 but you're introducing new terms that are more

1	vague than what is in the NPRM. Could we just
2	consider going back to what was already part of
3	this, and methodologies minimize the release of
4	gas to the environment? It's much more clear
5	to me. Thank you.
б	MR. DANNER: Erin?
7	MR. MURPHY: Yeah, I would be fine
8	with that too.
9	MR. DANNER: Chad Zamarin?
10	MR. ZAMARIN: Chad Zamarin with
11	Williams. I like the proposal that was made,
12	that I think might have just been erased, only
13	because it specifies in kind of the earlier
14	section of this to prevent and minimize
15	emissions.
16	This is the documentation portion
17	and I think it makes sense for this to be clear
18	that the intent is to document in your company
19	procedures how you'll basically be implementing
20	this section, but I don't know why we would
21	further define things. So, I like the friendly
22	amendment that Erin made better than the way it

was drafted.

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2	MR. DANNER: So, you would prefer
3	the language that is up there now, including
4	evaluation of environmental impacts?
5	MR. ZAMARIN: I would, yes.
6	MR. DANNER: Okay, Sara Longan,
7	based on what you've heard, does that change
8	your view?
9	MS. LONGAN: I'm close. I think
10	we're really working on semantics here. As a
11	regulator and someone who is used to being in
12	the field, I hearken back to Peter's earlier
13	comments, albeit on a different subject,
14	including evaluation of environmental impacts.
15	Boy, I'd want an associated in there
16	somewhere because to me that new language just
17	opens the door to potentially more than what
18	the intention of the revision includes. Thank
19	you.
20	MR. DANNER: So, you would propose
21	putting evaluation of associated environmental
22	impacts in there just to limit it so that we're
1	not going to be talking about
----	--
2	MS. LONGAN: It helps me.
3	MR. DANNER: Yeah.
4	MS. LONGAN: To me, in the field as
5	an auditor, it still changes what was in the
6	NPRM, but again, I think this is semantics and
7	I can be there either way. Thank you.
8	MR. DANNER: All right, Peter?
9	MR. CHACE: Pete Chace, NAPSR. What
10	environmental impacts are we worried about
11	other than release of gas to the environment?
12	MR. DANNER: Well, if it's not
13	associated, I mean, it could be water quality.
14	It could be air quality. It could be impact on
15	flora and fauna. I mean, it depends on what
16	you think that your inspectors like, what
17	your inspectors would want to look at. Erin?
18	MR. MURPHY: Thanks, Erin Murphy,
19	EDF. Apologies if I've gone in circles, but I
20	think as the discussion sort of moves around,
21	it does seem to me more appropriate, maybe, to
22	stick with the language in the NPRM to require

1 the explanation for how, you know, the 2 evaluation minimizes the release of gas to the 3 environment, because I think that, you know, that is consistent with the language in subpart 4 5 Α. MR. DANNER: All right, Commissioner 6 7 Burman? 8 MS. BURMAN: I agree with Erin. Ι 9 think that -- and Sara Longan. I think we should revise to 10 say the operators must 11 document in their procedures the methodologies 12 used in paragraph A of the section and describe 13 how the methodologies minimize the release of 14 gas to the environment. It's clear here that 15 we're taking what was proposed by PHMSA and 16 putting it now into the procedures, and then we 17 don't have, you know, conflicting what does it 18 mean, what we're saying. 19 All right, Brian? MR. DANNER: 20 MR. WEISKER: Brian Weisker, Duke 21 Energy. As proposed, the bottom one there, the 22 192.7 as proposed with the five asterisks, if

1 change minimize to reduce, so we would we 2 describe how these procedures and methodologies 3 reduce the release of gas to the environment. MR. DANNER: All right, that opens 4 5 up a different debate. 6 (Laughter.) 7 So it is 4:30, and I MR. DANNER: 8 hope no one has dinner plans. So, Erin? 9 MS. MURPHY: Yeah, I think, you know 10 -- Erin Murphy, EDF -- my circling around to, 11 to wanting to support the language in the NPRM 12 is, you know realizing that language is 13 consistent with the earlier part of this 14 section that requires operators to evaluate a 15 number of available methods. And that 16 language, that section uses, you know, the 17 language to minimize the release of gas. And 18 that's consistent with the statutory language 19 in the PSAC of 2020. 20 So, Ι think it's appropriate to 21 retain the term minimize, not reduce. 22 MR. DANNER: Peter Chace?

1	Oh, all right. Sara?
2	MS. LONGAN: This is Sara Longan.
3	Just for some of us who do have
4	dinner plans I'm not one of those people
5	I fully understand where Erin is coming from.
6	And I think, just to offer a friendly
7	amendment, if not a consideration at this
8	juncture, we're talking about mitigation. The
9	word prior is referring specifically to
10	mitigation methods.
11	Could we consider, instead of
12	choosing reduce or minimize that triggered
13	hours of conversation earlier today,
14	methodology mitigates the release of gas to the
15	environment.
16	MR. DANNER: Chad?
17	MR. ZAMARIN: Yeah. I would support
18	that.
19	But, again, I go back to I think we
20	have to be careful that we're not trying to
21	kind of reestablish requirements that were
22	created in other parts of the language. And I

think that the section of the language describes what this, what the intent is in selecting methodologies. This is what you're supposed to document.

5 And to me, documenting how you went 6 through this section is, I think, the intent of 7 this section. So, I mean, I would support that language. But I would be careful making it too 8 specific 9 in this section and having it 10 misinterpreted.

11 So, I, again, I like it where we just said -- I actually like operators must 12 13 document and justify in their procedures. And 14 that's how it is used in the course of this 15 I think I got, you know, numbered on section. 16 that one. But because I thought everything 17 talked about is addressed in else we other 18 parts of this section already.

19But, again, I -- those are my20thoughts. Thanks.

21 MR. DANNER: So, I guess my question 22 to you is, is the language at the bottom of the

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page there okay?

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2	MR. ZAMARIN: Yeah. I think what I
3	said is I will agree to wherever the committee,
4	I think, ends on this issue. This is not I
5	don't love the potential misinterpretation of
б	two different portions of this section. I
7	think this being the document how you, you
8	know, implemented this section in your
9	procedures.
10	But, yes, I would support that.
11	MR. DANNER: Okay.
12	Sara?
13	MS. GOSMAN: Yeah. So, I think
14	we've morphed into a discussion about the
15	actual language in (a), which is prevent or
16	minimize.
17	So, it seems to me that whatever
18	documentation is done should be based on the
19	requirement on the operator. And that language
20	is to prevent or minimize.
21	So, if we're going to have a
22	discussion about the prevent or minimize

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1 language, I feel like we should do it there and 2 not in the documentation requirements. 3 MR. ZAMARIN: Yeah. That's exactly 4 -- Chad Zamarin again -- that's exactly why I would strike it from this section and I would 5 6 document how you complied with just say 7 paragraph which includes (a) that language 8 already. 9 that, that And was my original 10 proposal is just say we're trying to make clear 11 here that operators must document how they're 12 navigating through this section (a) and making 13 the determination. Let section (a) dictate 14 what criteria needs to be used to make that 15 decision. 16 MR. DANNER: And would that be 17 acceptable to others? 18 It's acceptable. MS. GOSMAN: Sara 19 It's acceptable to me, but I still Gosman. 20 feel like we're dancing around the issue. 21 Right? 22 I mean, that is if the real concern

1 here is about that language, about prevention 2 and minimization, then we should -- I can't 3 believe I'm saying this -- but we should have 4 that conversation rather than try to make the 5 reporting or, sorry, documentation language more vague, right, to address whatever's in (a) 6 7 if whatever is in (a) is not, is not something 8 that folks on the committee want. 9 MR. ZAMARIN: Could we say something 10 like operators must document in their 11 procedures the methodologies used to comply with paragraph (a) of this section? 12 13 That's fine with me. MS. GOSMAN: 14 But, again, I just feel like this is a conversation that's actually about something 15 16 else. I'll just say that. 17 Would MR. DANNER: that be 18 acceptable to you where you said methodologies 19 comply with paragraph used to (a) of this 20 Any thoughts on that? section? 21 MR. WEISKER: Could we strike the 22 and describe all the way through the end of the

sentence there?

1

2 MR. DANNER: Yeah. Because then now 3 we're requiring that they describe their 4 compliance with paragraph (a), which also talks 5 about, you know, everything in it. For this, yes. For this, yes. 6 7 MR. WEISKER: All right. 8 MR. DANNER: Erin Murphy? 9 Yeah. Ι think the MS. MURPHY: 10 second clause of the sentence was included in 11 the NRPM by PHMSA and is appropriate to retain. 12 And Ι don't think I would support removing 13 that. 14 I'm comfortable with the language 15 and what Chad was proposing, which I think is 16 what's on the screen now. 17 Okay. Trying to get a MR. DANNER: 18 sense of the committee. 19 speak if they Can anyone up have 20 opposition to what is on the screen now? 21 As soon as we get the screen down. 22 I am not hearing any opposition to

1 what's up there now. 2 Sara? 3 MS. GOSMAN: I'm confused about the 4 language that's up there now. 5 methodologies So, used to comply. 6 Oh, now it's gone away. Okay. 7 limited the So, we are to 8 methodologies used to comply with paragraph (a) of this section. Is that where we are? 9 Well, that's where we 10 MR. DANNER: 11 were. And then I hear Erin say that she wanted 12 the second clause. And we had some agreement 13 with some industry people. 14 Is that right? Okay. 15 MS. GOSMAN: Okay. Can we put that 16 language up? 17 it would MR. DANNER: So, be 18 their operators must document procedures, 19 methodologies used in paragraph this (a) of section and describe how the methodologies 20 21 mitigate the release of gas to the environment. 22 We're keeping Sayler on his toes

1 here. All right. Mitigate the release of 2 3 gas to the environment. 4 Oh, okay. Erin? 5 MS. MURPHY: So, Ι was Т do 6 support this language. I, I was expressing 7 support for the revision that I think Chad had 8 proposed, but he can correct me. But to make 9 that second clause describe how methodologies 10 satisfy the standard. 11 Ι don't remember what it was. 12 Right? 13 It was comply with. MS. BURMAN: 14 Comply with. Thank MS. MURPHY: 15 you. 16 MS. BURMAN: So, you're taking out, if 17 Operators must document in their Ι _ _ 18 procedures the methodologies used in paragraph 19 (a) of this section and how they comply with. 20 MR. DANNER: Comply with that 21 paragraph. 22 MS. BURMAN: Yes.

1	MS. MURPHY: Yeah.
2	MS. BURMAN: And, and then I think
3	the rest comes out.
4	MR. DANNER: Yeah.
5	Okay, I think, yeah, you can say
6	that. Or you can say comply with, that, that
7	paragraph, period.
8	Are people okay with this paragraph?
9	Brian?
10	MR. WEISKER: I was getting ready to
11	make a motion.
12	MR. DANNER: Okay. Well, actually,
13	first you need to withdraw your earlier motion.
14	MR. WEISKER: Withdraw the Do I
15	have to read all the way through?
16	MR. DANNER: You bet you do.
17	MR. WEISKER: All right. So, I am
18	withdrawing my previous motion of the proposed
19	rule as published in the Federal Register and
20	as supported by the preliminary regulatory
21	impact analysis and draft environmental
22	assessment with regard to blowdown mitigation,

1 section 192.770, is technically feasible, 2 reasonable, cost-effective, and practical if 3 the following changes are made. That's not what it -- there 4 was, 5 what was originally up there is not there now. Can I just with -- can I just say I 6 withdraw that and then, and then propose a new 7 8 motion? 9 MR. DANNER: Wait. So, what is up 10 there now is not what you want to propose? 11 MR. WEISKER: No, it is. But you said I needed to read, completely re-read the 12 13 one that I want to withdraw. 14 MR. DANNER: Oh, no. You just keep 15 reading, you just keep reading it. 16 MR. WEISKER: Okay. And so, now --Start with revise. 17 MR. DANNER: 18 That's where you left off. 19 MR. WEISKER: And now I'm going to revise 192.777(c) to read as follows: 20 Operators must document in their 21 22 procedures the methodologies used in paragraph

1	(a) of this section, and describe how the
2	methodologies comply with that paragraph.
3	MR. DANNER: All right. There is a
4	motion before us.
5	Is there a second?
6	MS. MURPHY: Second.
7	MR. DANNER: All right. Erin Murphy
8	seconded.
9	And, Cameron, can you take the vote?
10	MR. SATTERTHWAITE: All right. I
11	will say your name. If you agree with the
12	motion, just say yes. If you do not, say no.
13	Diane Burman.
14	MS. BURMAN: Yes.
15	MR. SATTERTHWAITE: Peter Chace.
16	MR. CHACE: Yes.
17	MR. SATTERTHWAITE: David Danner.
18	MR. DANNER: Yes.
19	MR. SATTERTHWAITE: Sara Longan.
20	MS. LONGAN: Yes.
21	MR. SATTERTHWAITE: Terry Turpin.
22	MR. TURPIN: Yes.

1		MR.	SATTERTHWAITE:	Brian Weisker.
2		MR.	WEISKER: Yes.	
3		MR.	SATTERTHWAITE:	Andy Drake.
4		MR.	DRAKE: Yes.	
5		MR.	SATTERTHWAITE:	Alex Dewar.
б		MR.	DEWAR: Yes.	
7		MR.	SATTERTHWAITE:	Steve Squibb.
8		MR.	SQUIBB: Yes.	
9		MR.	SATTERTHWAITE:	Chad Zamarin.
10		MR.	ZAMARIN: Yes.	
11		MR.	SATTERTHWAITE:	Chad Gilbert.
12		MR.	GILBERT: Yes.	
13		MR.	SATTERTHWAI	TE: Arvind
13 14	Ravikumar.	MR.	SATTERTHWAI	TE: Arvind
13 14 15	Ravikumar.	MR. MR.	SATTERTHWAI	TE: Arvind
13 14 15 16	Ravikumar.	MR. MR. MR.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE:	TE: Arvind Erin Murphy.
13 14 15 16 17	Ravikumar.	MR. MR. MR. MS.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes.	TE: Arvind Erin Murphy.
13 14 15 16 17 18	Ravikumar.	MR. MR. MR. MS.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE:	TE: Arvind Erin Murphy. Sara Gosman.
13 14 15 16 17 18 19	Ravikumar.	MR. MR. MR. MS. MR.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE: GOSMAN: Yes.	TE: Arvind Erin Murphy. Sara Gosman.
13 14 15 16 17 18 19 20	Ravikumar.	MR. MR. MS. MR. MS.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE: GOSMAN: Yes. SATTERTHWAITE:	TE: Arvind Erin Murphy. Sara Gosman. Sam Ariaratnam.
13 14 15 16 17 18 19 20 21	Ravikumar.	MR. MR. MS. MS. MR. MR.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE: GOSMAN: Yes. SATTERTHWAITE: ARIARATNAM: Yes	TE: Arvind Erin Murphy. Sara Gosman. Sam Ariaratnam. s.
13 14 15 16 17 18 19 20 21 22	Ravikumar.	MR. MR. MS. MR. MR. MR. MR.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE: GOSMAN: Yes. SATTERTHWAITE: ARIARATNAM: Yes	TE: Arvind Erin Murphy. Sara Gosman. Sam Ariaratnam. s. It is unanimous.
13 14 15 16 17 18 19 20 21 22	Ravikumar.	MR. MR. MS. MR. MR. MR. MR.	SATTERTHWAI RAVIKUMAR: Yes SATTERTHWAITE: MURPHY: Yes. SATTERTHWAITE: GOSMAN: Yes. SATTERTHWAITE: ARIARATNAM: Yes	TE: Arvind Erin Murphy. Sara Gosman. Sam Ariaratnam. s. It is unanimous.

1 The motion carries. 2 MR. DANNER: All right. Thank you 3 very much. Appreciate it. We have a couple of loose ends here 4 5 that I feel compelled to bring up. do we need 6 One was to have а definition of documented engineering analysis? 7 And the other is what do we want to 8 9 do with regard to relief valves? 10 John? 11 MR. GALE: I believe -- Thank you, 12 Chairman. I believe some of the members may 13 have a recommendation on relief valve language. 14 Is that correct? 15 This is Chad Zamarin. MR. ZAMARIN: I think I raised those two issues as 16 17 ones I felt like we should discuss. I don't 18 know that I've got a language recommendation. 19 I was more interested in just making sure we 20 discussed it. 21 But I do, I think my proposal in the 22 discussion was I'm not you needed sure to

1 specify the need for an engineering analysis. 2 said you got to basically --I You can't 3 remember the language. I don't have it in 4 front of me. But strike that with removing 5 undefined -- an undefined term that I think would create a lot of confusion and is 6 7 unnecessary.

And then I think that we, we've been looking at the language around isolation of relief valves. And it feels like that could be made more flexible to allow for the vast, you know, variety of different kind of designs that exist.

MR. GALE: Yeah. I believe, Member Squibb, do you by chance have some language that you're recommending we put on the screen? Yeah, gotcha.

We can pull it up if you like.
I'm not seeing it.
The recommended language, Member
Squibb, was actually sent to staff. And we can
pull it up if you'd like to read it from there.

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1	MR. SQUIBB: That would be great.
2	MR. GALE: Okay. Pulled it up.
3	MR. SQUIBB: So this is our number
4	one, was the way it's on here, one. PHMSA
5	should refrain from using the undefined concept
б	of a documented engineering analysis.
7	Take these one at a time.
8	MR. GALE: If you could maybe just
9	read through it and then we'll let the chairman
10	decide how he wants to go from there.
11	MR. SQUIBB: Yeah. Why don't we,
12	why don't we deal with all of these at one
13	time.
14	Okay. Two, PHMSA should incorporate
15	the changes to device maintenance in existing
16	192.739.
17	Three, operators must take immediate
18	action, not continuous action, to address
19	malfunctions.
20	Four, repairs must occur as soon as
21	practicable. And PHMSA should remove the
22	prescriptive requirement to repair or replace
-	

within 30 days.

1

2	Five, remove the requirement for
3	upstream and downstream isolation valves and,
4	instead, require the ability to isolate the
5	relief valve for maintenance and testing.
6	Six, pressure choking should not be
7	included in design considerations as it is a
8	phenomenon that may be unavoidable.
9	MR. DANNER: All right. Thank you
10	very much.
11	I guess this was one where I don't
12	have a sense of if we refrain from using the
13	undefined concept of a documented engineering
14	analysis is there language that PHMSA could
15	use? Because I think we all have a sense of
16	what they're talking about.
17	Is there another concept that would
18	substitute for that?
19	Chad?
20	MR. ZAMARIN: Thank you, Chair.
21	Chad Zamarin, Williams. I think if you read
22	that sentence, I'm just not sure it's

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necessary. The sentence, as I'll read it, is all new, replaced, relocated, or otherwise changed pressure relief and limiting devices must be designed and configured, and then it says, as demonstrated by documented engineering analysis to minimize unnecessary release of gas by ensuring each of the following.

8 I mean, you already have a 9 requirement there. It's just adding to, to 10 have a documented engineering analysis.

MR. DANNER: So, you would just remove those three words from the sentence? MR. ZAMARIN: I would just remove those words because they're undefined. I think it will create a lot of uncertainty.

16 And, you know, having this very 17 specific requirement is going to require 18 standards to be updated, procedures to be 19 updated, design requirements to be updated. 20 And that's, I think, where that will live, and 21 should.

22

MR. DANNER: All right. Is there

1 any discussion? 2 Erin? 3 MS. MURPHY: So, my under -- Erin 4 Murphy, EDF -- my understanding is that there 5 is the concern is the lack of clarity around 6 the term. 7 Could committee the also not recommend that PHMSA consider a definition for 8 9 the term so that there's clarity for operators 10 rather than removing what seems like an 11 important analysis, potentially? 12 MR. ZAMARIN: Sorry, Chair. This is 13 Chad Zamarin again. 14 If you go back to this actual 15 section as proposed, it has a whole series of requirements that I think kind of define what 16 17 the engineering requirements are. So, Ι 18 didn't, I didn't finish the end. 19 Ιt demonstrated says as by 20 documented engineering analysis to minimize 21 unnecessary releases of gas, and then it says 22 by ensuring each of the following. And there

1	are several requirements that are included.
2	Again, it just feels like, I mean,
3	it feels like we're creating a term but we've
4	already defined kind of the standard
5	expectation and all of the requirements that,
6	the minimum requirements that fall within it.
7	And so, I did think it, it could be
8	interpreted to mean that for every single
9	relief valve I mean, the way this is
10	practically going to happen is, I think,
11	engineering standards are going to be updated
12	based on these requirements and that that will
13	become the way that we design and install
14	relief valves.
15	MR. DANNER: Yeah. I guess my
16	concern is if you take, if you just ask PHMSA
17	to define that term then we're going to have to
18	have a discussion about what that definition
19	is.
20	MR. ZAMARIN: Right. And that's my
21	point. I think it's defined, I think the
22	requirements of it are effectively defined by

1 the criteria that are listed in that section. 2 So, I don't know if members need a chance to 3 look at it, but there's quite a bit of 4 specificity in there that I think mitigates the 5 need for that term. MR. DANNER: All right. Any other 6 7 discussion on that? 8 Could you raise, go up? Ι mean 9 down. So, there. That's --10 MR. ZAMARIN: I don't actually think 11 that's the right language. I think this is 192.199(i). There you go. 12 13 MR. DANNER: Can you keep scrolling 14 Or down. up. 15 MS. BURMAN: Can you go back up? 16 So, what we're saying is all new 17 relocated, replaced, or otherwise changed 18 pressure release and limiting devices must be 19 designed and configured. And we take out as 20 demonstrated by a documented, perhaps take out 21 demonstrated by a documented engineering as 22 analysis.

1	And the why we're doing this is to
2	minimize unnecessary releases of gas by
3	ensuring each of the following.
4	And then the numbers are setting
5	forth the criteria and analysis.
6	So, I think, Erin, if I'm not
7	mistaken, this demonstrates by a documented
8	energy engineering analysis is unnecessary
9	because the criteria is set forth in there.
10	But just to make clear, sort of
11	pause, because I think each section Can you
12	go now up to, well, go one, two, keep going,
13	one, two, and three. So, all of these are the
14	criteria analysis. And so, we don't need to
15	worry about how to define documented
16	engineering analysis because it's this set of
17	criteria that's defining what the why is and
18	what's required.
19	MR. DANNER: Thank you.
20	Sara Gosman?
21	MS. GOSMAN: So, I'm not wedded to
22	the term engineering analysis, but I wonder

1 what is the documentation then? If these are 2 particular actions to be taken by operators, 3 how is PHMSA going to know whether the 4 operators have taken these steps? 5 And do we have language here that we in terms of documentation 6 can iust use as 7 opposed to engineering analysis? 8 MR. DANNER: Chad? 9 Yeah. Chad Zamarin MR. ZAMARIN: with Williams. 10 11 Yeah, I think there could be some 12 language. mean, Ι think in practical Ι 13 will lead to updates application this to 14 engineering standards, operating and 15 think maintenance procedures. And Ι that 16 that's where you ultimately demonstrate, then, 17 your compliance with these requirements. 18 if So, and necessary, there are 19 engineering standards and third party standards 20 that may be updated. I don't know. But that's 21 usually where those kind of consensus standards 22 would contain the support for those changes.

1	But I think maybe it references like
2	we did in the last one that it's documented in
3	your, in your ensuring standards or operating
4	and maintenance procedures. Something to that
5	effect.
6	MR. DANNER: Diane?
7	MS. BURMAN: Maybe, also, when we
8	are recommending to remove as demonstrated by a
9	documented engineering analysis we make clear
10	that it is sufficient to have the criteria set
11	forth. But we're not, we're not asking for the
12	criteria analysis laid out one to three to be
13	removed.
14	MR. DANNER: All right, thank you.
15	Erin, did you have your card up?
16	No. Okay.
17	Peter? Okay.
18	All right, it looks like it has been
19	suggested that we remove that term and
20	documented. Does that meet with everyone's
21	approval here?
22	Sara Gosman?

1 MS. GOSMAN: That's fine. I mean, I 2 think it. sounds like there could be more 3 specificity in terms of, let's say, procedures, 4 like which is language we used before. I quess 5 I would prefer that. But I'm also fine with the language documented. 6 7 MR. DANNER: Chad? ZAMARIN: Yeah, 8 MR. Chad Zamarin, Williams. 9 10 And just to be clear, and I think we 11 can say documented, and there could be, like we did in the last one, more specificity. 12 13 But when you have engineering 14 standards and requirements in a code like this, 15 operators are going to have to demonstrate that 16 they incorporate those into their standards and 17 procedures. Ι mean that's, that's how the 18 entire code works. 19 If the code has a requirement, you 20 don't have to say that it's documented in your, 21 in your procedures. We have to demonstrate 22 that we comply with that.

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1	But I think it's fine to state it.
2	But that's, that's in practical application
3	that's how it works. I mean, the regulator
4	will bring this out and will say, show me how
5	you comply with this requirement. And if it's
6	not in your procedures, or your standards, or
7	you haven't documented it when you make that
8	modification or installation, you're not going
9	to be in compliance.
10	So, I think by having, having the
11	requirement that you must do this, this
12	hopefully brings some comfort that that means
13	operators will have to incorporate these into
14	their standards and procedures.
15	MR. DANNER: All right, thank you.
16	Peter?
17	MR. CHACE: Pete Chace, NAPSR.
18	I will say as a compliance
19	investigator I will echo what Chad said. If
20	you've got a requirement in the code that says
21	design and configure, you're going to have
22	engineering design standards where acceptable

1 components and design parameters are spelled 2 I personally believe design and configure out. 3 is adequate. MR. DANNER: But you don't object to 4 5 the word and documented in there? I just think it's 6 MR. CHACE: No. redundant. 7 8 MR. DANNER: Yeah. All right. 9 Sara. 10 MS. GOSMAN: Because the language included as demonstrated by a 11 documented 12 engineering analysis, I guess my only concern 13 is I completely understand the point that this 14 would otherwise be documented, but I feel like 15 keeping the documentation language in there is 16 a story that we are telling, right, because we 17 advising the language around engineering are 18 analysis. 19 So, I would prefer, I recognize that 20 it is repetitive, but I would, I would prefer 21 having and documenting in the language. 22 MR. DANNER: All right. Is there

1	any further discussion on these amendments?
2	MS. BURMAN: Can we go back to the
3	page that had, well, I think we Yeah.
4	MR. DANNER: Yeah.
5	MS. BURMAN: So, number one, PHMSA
6	should remove the term.
7	Number two, PHMSA should incorporate
8	the changes to device maintenance in existing
9	192.
10	I think the only thing, the only
11	thing on four, repairs must occur as soon as
12	practicable, and PHMSA should remove
13	prescriptive requirements to repair or replace
14	within 30 days, I support. I think it should
15	be as soon as practicable.
16	But I am concerned that it does
17	sometimes cause, as a state regulator, if we
18	don't have sort of a bookend end date, it's
19	hard for us to get folks to, you know, perhaps
20	it'll be harder to get them to repair or
21	replace, or to get buy-in in terms of cost
22	recovery as it related to the state regulator.

1	MR. DANNER: Yeah, thank you.
2	When I was looking at that I was, I
3	was wondering if we could say something like
4	within 30 days or as soon as practical or
5	practicable. Or, alternatively, just set an
6	outer date to say as soon as practical, but
7	within X number of days. And if 30 is not
8	enough, you know, go to 40, 45.
9	I'm just wondering if there's some
10	way we could do, do that? And the concern is
11	30 days could be too short. But I agree with
12	you that we should have some kind of a bookend
13	there.
14	Okay. Terry Turpin?
15	MR. TURPIN: Terry Turpin from the
16	Federal Energy Regulatory Commission.
17	I would add on the 30 days I think
18	you're going to find in some circumstances
19	getting out there and getting the environmental
20	clearances and permits you might need in some
21	circumstances is never going to be possible in
22	that time frame. It's not going to be possible

in 45 days either.

1

2	So, I think what, what you've got
3	with the 30 days is it will probably work in
4	many areas where it's just, you know,
5	mechanical replacement. But if there is any
6	activity that involves getting equipment out
7	onto a right-of-way, then 30 days is never
8	going to be achievable.
9	You've got to tie this to as soon as
10	practical after the necessary environmental
11	clearances have been obtained or something like
12	that.
13	MR. DANNER: Would you be okay with
14	something that said within 30 days or as soon
15	as practicable?
16	MR. TURPIN: Yeah. I think as long
17	as folks understand that that as soon as
18	practicable encompasses getting those
19	environmental clearances.
20	MR. DANNER: Well, yeah. I think
21	the concern here is we don't want this to drag
22	on longer than it has to. And as soon as

1 practicable might be in the eyes of the 2 beholder. And that's what we're to avoid. 3 Okay. Arvind? MR. RAVIKUMAR: Arvind Ravikumar, 4 5 University of Texas. I agree with Commissioner Burman's 6 7 point about having an end date for this. So, 8 perhaps something like as soon as practicable 9 but not to exceed three months or six months, 10 whatever that maximum time frame is. 11 MR. DANNER: The issue becomes there 12 what's, you know, what's the floor and what's 13 the ceiling? Because if you say, if you say 14 60, that's what people will take. If you say 15 90, that's what, that's what people will take. 16 Even if it says as soon as practicable. 17 But, you know, I, I keep coming back to I would leave the 30 days or as soon as 18 19 practicable. But I don't know, I don't know 20 what works here. 21 But Chad does. 22 MR. Yeah. Thank ZAMARIN: you.

1 Chad Zamarin. I don't know about that either. Chad Zamarin with Williams. 2 3 Т do think, again, this context 4 helps in this if you read the entire section. 5 This is applicable for when a pressure relief device is malfunctioning. 6 You have to 7 immediately stop any emissions that are being caused as a result of the malfunction of the 8 9 device. And then it's setting a 30-day 10 requirement to repair or replace the device. 11 So, this is not like we're, we're not talking about allowing the device to be 12 13 venting for 30 days or longer. I do think we, 14 we have to have -- we have in this section an 15 immediate action to stop the release until the 16 device is repaired, but then it says it's then 17 limiting the timeline for repair to 30 days. 18 Ι think that having a practicable 19 standard is important. I mean, supply chain 20 issues, permitting issues, relief valves, once 21 the issue has been addressed I think operators 22 need the ability to schedule those repairs and,

and manage those appropriately.

1

2	So, I do just want to point out I
3	think it's important to see the whole section.
4	That we're not talking about allowing an event
5	to go beyond 30 days, we're only talking about
6	the timeline to address that piece of equipment
7	so that the next time it needs to operate, it
8	operates appropriately.
9	MR. DANNER: So, I mean, the reason
10	I was partial to the PHMSA language is I, I do
11	feel you want to sort of give folks an idea of
12	what your expectations are. Perhaps as soon as
13	practicable is, is stronger. I'm not sure that
14	it is.
15	MR. ZAMARIN: Yeah, sorry. Chad
16	Zamarin.
17	I, again, I agree. But, I mean, I
18	would, I would propose if you did need to put
19	an outer bound on it for it to be, you know, 6
20	months or even 12 months.
21	I mean, we're talking about, we're
22	talking about construction activity that does

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require you, you have to immediately address the issue that's occurring. But then you have the ability to schedule the repair appropriately.

5 address And that's how we most things in the code, in a way where you can take 6 7 into account -- I mean, you may have to take an 8 outage to make a relief valve repair. You 9 know, if you put a 30-day requirement on that 10 and the relief valves fails, it's not just a 11 permanent issue, this might be in the middle of winter, and it doesn't make sense to replace 12 13 the relief valve until you get to the next 14 spring and you're in a shoulder mode. 15 And so --16 MR. DANNER: And you don't think 17 that would be caught under saying 30 days or as 18 soon as practicable? 19 I think you'd have to MR. ZAMARIN: 20 make sure the language is in a way that it's 21 clear, that the 30 davs is not a limit.

Because when I hear that, it sounds like a

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4
1 limit. You know, you have -- I would -- it's 2 always the thing --3 MR. DANNER: But, again, or as soon 4 as practicable. So, if it's not practicable, 5 the 30 days gets extended until you can get it done. 6 7 MR. ZAMARIN: Yeah. I, I'd be fine 8 with that conceptually, except for the fact 9 that I'm not sure where I get the 30 days as a target or a goal, but. 10 11 MR. DANNER: Okay. MR. ZAMARIN: 12 Yeah. 13 MR. DANNER: Thank you. 14 and then Peter, Diane, Brian and 15 Sara. 16 MR. WEISKER: Brian Weisker, Duke 17 Energy. 18 And Chad covered most of what I was 19 going to say. But, I mean, it's permitting, 20 it's materials, it's planning. So, I think 21 we've beat 30 days to a horse here, but I 22 definitely support the as soon as practicable.

1	MR. DANNER: Peter?
2	MR. CHACE: Pete Chace, NAPSR.
3	I'll say first of all I think
4	industry's concerns about the 30 hard cap are
5	legitimate.
6	I'll also say that as compliance
7	inspectors we've always been talking through
8	Frequently Asked Questions or, you know,
9	interpretation that as soon as practicable
10	means until the next scheduled inspection,
11	which I think is annual in this case.
12	MR. DANNER: So, again, the language
13	that says 30 days or as soon as practicable,
14	you see that as meaning 30 days and not 30 days
15	or as soon as practicable?
16	MR. CHACE: FAQs can be changed.
17	I'm just saying that that's what, as state and
18	inspectors, that's what we've always been
19	taught as far as enforcing as soon as
20	practicable.
21	MR. DANNER: Okay. Thank you.
22	Diane?

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1	MS. BURMAN: So, I recognize that
2	there can be supply chain issues. I am
3	concerned, though, that as a state regulator it
4	becomes difficult if we don't have, you know, a
5	backstop.
6	To me it's within 30 days or as soon
7	as practicable. This is dealing with maximum
8	allowable operating pressure. And it does
9	become a challenge if we don't have, you know,
10	it's in the eyes of the beholder, and sometimes
11	it becomes an issue.
12	So, if we're going to extend the
13	time, if we're not going to have it within 30
14	days or as soon as practicable, I'd rather go
15	back to repairs must occur as soon as
16	practicable. But I am concerned about looking
17	at saying within 90 days or six months. It's
18	maximum allowable operating pressure, and it
19	should be done.
20	And I do think that part of the
21	challenge is, especially when it comes to, you
22	know, getting us as state regulators to make

1	sure that this is front and center, we need to
2	work with our utilities and say they've got to
3	do it. And they've got to do it ASAP.
4	And I'm just concerned about it.
5	MR. DANNER: So, it's your view we
6	should just simply remove number four and leave
7	it the way it is?
8	MS. BURMAN: No. I think that, I
9	mean, I'd like to see within 30 days or as soon
10	as practicable. But if we're talking about
11	extending that time period, I'd rather, then,
12	go to the first which was repair must occur as
13	soon as practicable.
14	But, you know, I think it's an
15	issue.
16	MR. DANNER: Sara?
17	MS. GOSMAN: Yeah. I feel like this
18	conversation is all about what is practicable,
19	and so how much fits into that category.
20	I think that we can put 30 days in
21	there, particularly since it was in the NPRM.
22	And then, you know, maybe most of this goes to

practicability. That's fine; right? But that 1 2 absolutely covers it. 3 So, I would like a shorter time period because I think that that's important 4 5 for you to signal. 6 And then, aqain, as soon as 7 practicable covers all of the issues related to 8 things like getting on site and the other 9 things. 10 But, so I'd agree with Commissioner 11 Burman. MR. DANNER: 12 Okay, Pete? 13 All right. Can I get a sense of the 14 group? 15 My own view is I'm fine with the 16 language that PHMSA has proposed here because I 17 do think that, basically, the backstop is as 18 soon as practicable. The 30 days is basically 19 what the default is, unless it's not 20 practicable. 21 And that's where I would be. But, 22 Chad? Neal R. Gross and Co., Inc.

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1	MR. ZAMARIN: Chad Zamarin,
2	Williams.
3	And maybe the language you just said
4	would be better. Because I agree with Peter,
5	if I saw this language I would interpret this
6	to mean as fast as you can but not to exceed 30
7	days.
8	And I think that's how, if we're not
9	careful, that it will be interpreted. And I
10	think any, most inspectors I think would likely
11	read that and say, you got to do it as soon as
12	practicable, but, but within 30 days.
13	And I think there are places in the
14	code where that actually gets clearly
15	interpreted that way.
16	MR. DANNER: So, what you said is
17	within 30 days unless, unless that period is
18	not practicable?
19	MR. ZAMARIN: I think that clarifies
20	it.
21	MR. DANNER: But then you'd have to
22	say as soon as practicable?

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1 MR. ZAMARIN: Т like as soon as 2 practicable. I think that's the best term that 3 -- Yeah. 4 MR. DANNER: All right. Sense of 5 the group. Do we just want to go with what's 6 in four here? 7 Sara? I'm just left thinking MS. GOSMAN: 8 9 that, I mean, there's text, and understanding 10 that text; right? The text is or. 11 So, when I read that text, as а think 30 days or 12 lawyer Ι as soon as 13 practicable. Those are both possibilities. 14 MR. DANNER: Yes. 15 MS. GOSMAN: And I think that is how 16 it should be read. And if we need a FAQ to 17 make that clear, that's fine; right? 18 But I, I think -- I don't think we 19 do a lot of complicated sort have to of 20 language here because the language as is with 21 the or covers it. 22 MR. DANNER: All right. We have a Neal R. Gross and Co., Inc. Washington DC

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1 hard stop at 5:30. So, I want everyone t0o 2 think about this quickly. 3 Again, my view is maybe take out the 4 parentheses with just 30 days or as soon as 5 practicable, because that is a choice. You 30 days or you have as 6 have soon as 7 practicable. And that, that's where I would 8 go. I would hear some other views. 9 Ι 10 just want to know how, where, where people are. 11 Andy? 12 MR. DRAKE: This is Andy Drake with 13 Enbridge. 14 I think the good thing that we're 15 having here is this is creating a record which 16 is clear guidance on what the intent was. And 17 I think I can live with as soon as practicable 18 in the construct of this conversation. 19 It cannot be applied as less than 30 20 days is the expectation. It won't happen. So, 21 think we just need to go on record. If we can 22 think of some words -- Chairman Danner your

1 words might be helpful there -- converting this 2 a little bit, that would be great. But I think 3 the record we're creating here suffices. Ι 4 agree with Sara. 5 Okay. I actually like MR. DANNER: what was just written there for four. 6 7 Sara? Sara Longan. 8 MS. LONGAN: Thank you, Mr. 9 I was just trying to read four. Chairman. I think we're all closer than what 10 11 it sounds like we are on this. And coming from 12 Alaska, I don't want to assure you, but I want 13 to remind you that 30 days will not happen when 14 conditions, have base roads, we no no 15 possibility of getting to field, and things are 16 buried in frozen ground. 17 I prefer what is written in four out 18 of the parentheses, 30 days or. 19 So, in your case 30 MR. DANNER: 20 days --21 MS. LONGAN: soon as as 22 practicable.

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1 MR. 30 days DANNER: ___ is an 2 aspiration. 3 MS. LONGAN: Thirty days --4 MR. DANNER: And in some of my areas 5 30 days is possible. 6 likely will MS. LONGAN: _ _ not 7 If it's difficult in Texas, please happen. think about how difficult it is in the Arctic. 8 9 Thank you. MR. DANNER: 10 Well, and that's why 11 you have a choice of 30 days or as soon as practicable. 12 13 Andy. 14 Andy Drake, Enbridge. MR. DRAKE: 15 I like what the revision wording you 16 just put up there is. That reflects the intent 17 of this conversation. 18 MR. DANNER: And I, I agree. 19 Others? Erin? 20 Erin Murphy, EDF. MS. MURPHY: 21 Listening to the discussion I just 22 want to emphasize, you know, and remind the

1 committee of some of the really detailed 2 explanation that PHMSA provided in the NPRM to support some of these proposed standards. 3 And what really, you know, stood out 4 5 to me is that in the period from 2010 to 2022 submitted 112 incident 6 operators reports for 7 the releases from pressure relief devices on 8 transmission and regulated gas gathering lines. 9 And that there was an average release volume of 10 12.5 mmcf. 11 That's a pretty significant release. 12 And that's a number of incidents. And that's 13 an average, which means there were some 14 incidents with, with even greater releases. 15 So, I think, you know, the standards 16 proposed in this section are really important. 17 And the flow rate that occurs during one of 18 these incidents can be so significant that time 19 does really seem to be of the essence to me. 20 So, I think the 30-day timeline that the agency 21 proposed makes a lot of sense. 22 discussion Hearing the around

1 impracticability, but just want to emphasize 2 that tight timeline was proposed for, for a 3 reason. 4 MR. DANNER: All right. Thank you 5 for that. 6 Sara Longan? Oh, okay. 7 Andy Drake. 8 MR. DRAKE: This is Andy Drake with 9 Enbridge. 10 Ι appreciate your comment, Erin. 11 But I think the key here is there's incidents, to the incident, and then 12 there's response there's repair. I think don't skip over that 13 14 just middle part, that because we have an 15 incident that it continues to blow down until 16 we, or continues to vent until this happens. 17 I think Chad mentioned that earlier. 18 There is а repair section that happens in 19 there. And then there's a response segment 20 that happens in there. And then that may take 21 a while to repair that relief device. But 22 maybe, those may be very separate events.

1 wouldn't skip over that Т middle 2 part that just because there was an incident 3 that we let it go on and on bleeding gas for 4 forever until we replaced -- until we repaired 5 it. I think that's really important to note here that the incident and this aren't the only 6 7 things that are happening. 8 MR. DANNER: Yeah. 9 MR. DRAKE: There is a response to 10 the incident that happens immediately. 11 MR. DANNER: But I don't -- I didn't hear from Erin that she opposed the language 12 13 that's up there now. 14 Do you? 15 MR. ZAMARIN: No, I didn't. 16 MR. DANNER: Okay. You didn't take this -- Okay. 17 18 Chad? 19 MR. ZAMARIN: Thanks. Chad Zamarin, 20 Williams. I do want to reiterate that I think 21 22 the data you just presented is important data

1 but I think it's a different issue. And that 2 is, making sure that relief valves don't vent 3 to begin with. This requirement is 4 once a relief 5 valve malfunctions you have to immediately stop the venting. And then you have some period of 6 7 time. 8 I think it's not in that data you 9 described, but if we went back to that data my 10 guess is very few, if any, of those were repeat 11 malfunctions of a relief valve. Once it malfunctioned this is requiring the operator to 12 13 stop the venting immediately and then giving 14 the operator a practical amount of time to 15 replace that relief valve. But it won't be 16 venting during that period of time. 17 So, I just want to be clear. But I 18 think that data is a little misrepresenting. 19 That's can we stop relief valves from venting 20 to begin with? 21 This is once they have, we need to 22 stop the venting and then we have a practical

1	amount of time to repair them.
2	Thank you.
3	MR. DANNER: All right, thank you.
4	We have 15 minutes remaining.
5	Diane.
6	MS. BURMAN: Thank you. I thought
7	this conversation was very helpful in terms of
8	clarifying, you know, sort of where we all
9	were. I do see it as in New York we probably
10	treat this as a Type 1 leak, and the company
11	would be on site until it was fixed.
12	I do recognize the distinction in
13	terms of response and repair.
14	I do think the language now
15	clarifies repair timelines to be 30 days unless
16	the repair timeline is impractical, in which
17	case the repair must be completed as soon as
18	practical, gets us to a comfort level. And I
19	could support that.
20	MR. DANNER: All right, thank you.
21	Anyone else on that one?
22	So, we have discussed one and four.
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1	Does anyone want to take on one of the others?
2	Chad Zamarin?
3	MR. ZAMARIN: Yeah. I was just
4	hoping that on number five I hope it's not
5	controversial but it's back in the same
6	section that we talked about on engineering
7	analysis. And it's just the specificity around
8	isolating of relief valves.
9	And I think that one of the public
10	comments was I think pretty wise to just say
11	you need the ability to isolate the relief
12	valve, but maybe not be specific on where you
13	have to install valves, because there are so
14	many different configurations of relief valves.
15	And so, trying to find where that
16	language is.
17	Yeah, 199.3? Yeah, sorry. It says,
18	installation of the pressure relief valve
19	device must include upstream and downstream
20	isolation valves to facilitate the seam
21	maintenance.
22	There are some relief valves that

1 have downstream piping, they're don't. iust there's a valve that will isolate the relief 2 valve because the relief valve is on the end of 3 4 a stem. So, I don't know why we don't just say 5 installation -- the ability -- somebody had proposed language, I thought, that the ability 6 7 to isolate -- does it say up there? 8 Yeah. Instead, require the ability to isolate the relief valve for maintenance and 9 10 testing. That seems like a better language. 11 MR. DANNER: All right. Thank you. And, Sara Gosman? 12 13 MS. As for the GOSMAN: rest of 14 them, I'm looking at two and three, which we haven't discussed yet. 15 16 I think the committee's job is to 17 changes to policy, not necessarily propose 18 where to put things in the code. And so, if 19 this is the recommendation as it relates to 20 where to put things in the code, I would prefer 21 that PHMSA make that judgment. 22 If there's more to it than that, I

would like to know.

1

2	And then in terms of number three, I
3	assume that this relates to the concern that
4	you'd have to actually continually be
5	addressing this as opposed to the, the issue of
6	having it be immediate, that is, soon, sooner
7	rather than later.
8	I'm not against this language, but I
9	just think that immediate action, right, is
10	important here because we are talking I think
11	that needs to be addressed sooner. And
12	continuous action seems to me to be about,
13	like, actually getting on the site and doing
14	the work. And I don't know why we would not
15	want that, I guess.
16	MR. DANNER: All right. Any
17	response to those thoughts?
18	Brian. Brian?
19	MR. WEISKER: Sorry. It's getting
20	late in the day.
21	Brian Weisker, Duke Energy.
22	As far as the immediate, I mean, so
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1 the idea is there's a malfunction, we take 2 immediate action and go out and respond to it. 3 And then that, that corrective action could be 4 complete and we could be in a stable condition 5 that you don't need to have someone there, continuously there, until you get to a point 6 7 later. 8 That's the concept behind immediate and continuous. 9 10 MR. DANNER: Others? Chad? 11 MR. ZAMARIN: Yeah. So, Sara, maybe 12 Ι don't think it was saying take immediate 13 It's saying require immediate action, away. 14 but just not specify continuous action if it's 15 not required. 16 Is that? 17 So, is there -- I guess MS. GOSMAN: 18 maybe my question is, all riqht, we're so 19 keeping immediate action. Are we deferring any 20 important decisions here in getting rid of 21 continuous? Because continuous seems to be an 22 indication to continually work on the problem.

1	MR. ZAMARIN: Yeah. Chad Zamarin,
2	Williams, again.
3	The way this section is written, and
4	I think Brian was right, I mean this is if a
5	relief valve malfunctions, you have to take
б	immediate action, you have to stop the
7	malfunction of the relief valve. But then it
8	does take time to repair the valve.
9	The way this section is written is
10	it says you must then take you must take
11	immediate and continuous action with onsite
12	personnel to stop the release until the device
13	is repaired or replaced.
14	As we've just discussed, you know,
15	it may be, it may be 30 days, but it may be,
16	you know, Wyoming or Alaska or a place where
17	you can't. But if you've gotten to the
18	location, you've addressed it from an immediate
19	perspective, and it's safe until the repair can
20	be made, this section would require someone to
21	be there continuously until the repair is made.
22	And I don't I think I don't

1	think that makes sense from our perspective.
2	MR. DANNER: Peter?
3	MR. ZAMARIN: Zamarin. I'm sorry.
4	I'll give you an example. And this
5	happens in Wyoming, because in the wintertime
6	we do have upset conditions. It's a lot like
7	Alaska. And you will go out to a site, you
8	will isolate the location, and the relief valve
9	will then be isolated from the pipeline
10	infrastructure.
11	But then you will come back after
12	the winter and you'll make the repair to the
13	relief valve. You won't have somebody
14	continuously on site at that location, you
15	will, you will implement it in isolation of
16	that.
17	MR. DANNER: All right. Pete?
18	MR. CHACE: I think we've got a
19	couple issues; right? One is you stop the
20	release. And then you figure out alternative
21	way of controlling pressure to meet MAOP
22	requirements.

1	And then you've got to repair the
2	components.
3	I wonder if the immediate, the
4	continuous was intended as a way to ensure
5	pressure relief. Maybe there's a different way
б	to do that.
7	But I think that's what the intent
8	was here is, so, you've got a failed relief
9	valve, you shut it down, you isolate it. Are
10	you going to make sure you maintained MAOP?
11	I don't know the answer. I'm
12	MR. ZAMARIN: Yeah. I think we have
13	to. I mean, the code requires us to.
14	So, to your point, I think, you
15	know, that, that would be a requirement I would
16	assume.
17	MR. DANNER: Erin.
18	MR. CHACE: I'm sorry. So, is the
19	continuous necessary or is the code as it
20	exists adequate to ensure that pressure control
21	is going to be maintained even with an isolated
22	relief valve?

1	MR. DANNER: Well, I think that's,
2	that's what we have to discuss.
3	MR. CHACE: Yeah.
4	MR. DANNER: So, Erin?
5	MS. MURPHY: Erin Murphy, EDF.
6	I think I'd like to take a step back
7	here, because, you know, we are debating a
8	number of proposals that were just put forward
9	I think by a committee member but, also,
10	seemingly emailed in by some member of the
11	public in the audience. And, you know, we have
12	so much material to cover and get through this
13	week.
14	And there were a number of bullet
15	points that were distributed to committee
16	members, you know, identifying the areas where
17	PHMSA has requested feedback from this advisory
18	committee. And we're working diligently to
19	make our way through those.
20	And it feels to me like we've now
21	just delved into an additional area of issues
22	that were not previously identified for the

1 committee. And that, you know, makes it tough 2 to sort of evaluate in the for moment me without having technical familiarity with all 3 4 these issues. 5 just thinking about, And so, you know, the need to make progress over the time 6 7 this committee is convened, these matters feel 8 to me like things that, you know, are 9 appropriately raised in public comments by the 10 folks who are concerned about them. 11 MR. DANNER: So, we have just a few 12 minutes left. I wonder if you could put the 13 list of six items back up there. 14 Т think we have had a discussion 15 about number one, number four, and number five. 16 And we haven't had time to discuss the others. 17 just And I'm wondering what the 18 sense of the committee is. Should we, if we're 19 okay with one, four, and five, can we take a 20 vote on those, call it a day, come back and see if we want to discuss the others? 21 22 All right, I'm seeing heads nodding.

1	Erin?
2	MS. MURPHY: I understand, you know,
3	an interest in taking a vote on the items that
4	have already been discussed.
5	I would suggest the items that
б	haven't been discussed, you know, be set to the
7	side for the end of the deliberations on this
8	rule, if time allows.
9	MR. DANNER: Chad?
10	MR. ZAMARIN: Thanks. Chad Zamarin,
11	Williams.
12	Yeah, I think, I do think this is an
13	important discussion because I think it's our
14	job as a committee to come together. And I
15	think the process that we've been kind of
16	navigating through this time is different than
17	in the past.
18	In the past we would have gone
19	through every single change to every section of
20	the rule, and we would have had deliberations
21	on those. I think it is absolutely appropriate
22	and essential for the committee to raise, not

just debate those issues that are identified by PHMSA, but for us to bring our expertise to issues that we raise.

And so, I, I think we have to go through these sections, and not only address the questions that are being asked of us, but listen to the comments of the public. If there are issues that warrant discussion and debate around this table, I think that's the process we have to engage in.

11 So, I, I think working through these is the right process. And I don't think we can 12 13 just focus on a very limited number. If there 14 legitimate issues that committee members are 15 want to raise based on the comments, I think we 16 have to address those.

MR. DANNER: Well, yeah. And I'lljust add, throw in my thoughts.

I think that they are legitimate issues. They are ones that are technical that involve reading the code. And we haven't been able to do those on these yet.

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1	So, what I suggest is that we take a			
2	vote on one, four, and five, set the others			
3	aside. And we can decide in the morning			
4	whether we want to take those up or set those			
5	aside till after we're done with other things.			
6	But let's just get these three out of the way.			
7	Diane?			
8	MS. BURMAN: I think everybody, at			
9	least me, is tired. And I think that it might			
10	be helpful, since we've gone through this with			
11	processing a lot, to use this slide one through			
12	six as our first item to look at tomorrow. And			
13	we'll have a little fresher eye rather than			
14	voting.			
15	I know it's different from what we			
16	did before, but I think here they kind, they			
17	all kind of go together. And I, I do think			
18	that we may be able to easily get through this			
19	but also, you know, just incorporate any issues			
20	that we have before the meeting tomorrow. We			
21	might be able to talk through that.			
22	MR. DANNER: Well, I'm fine with			

1	that. I am just concerned that we have two			
2	days left to complete all of these, two, maybe			
3	two and a half days left to get through			
4	MS. BURMAN: So, what I would say			
5	MR. DANNER: leak protection.			
6	So, if we can start at 8:30 in the			
7	morning and take up two, three, and six, and			
8	then we can vote on the whole package.			
9	MS. BURMAN: So, what I would also			
10	say is I do recognize that we're all kind of			
11	looking towards the end goal of getting through			
12	this, plus class location. I do believe that			
13	if we take a step back and look, that we may			
14	get through this week, in needing to readjust			
15	our schedule. And class location may need to			
16	be set aside.			
17	I know. Don't, don't get upset.			
18	And that this way it gives us a			
19	little bit more breather. Plus, that I don't			
20	have to chair the second half of it.			
21	(Laughter.)			
22	MS. BURMAN: But, that way some of			
-				

1 the things that I think we're hearing as on the 2 table, we can make sure that doesn't get short 3 shrift because of time constraints. 4 And so, for me, I think it's a good 5 time for us to break and use this slide for all six to come back. 6 7 MR. DANNER: I would just Great. 8 ask, please, for those who are advocating for 9 two, three, and six, please bring some 10 information for us about, you know, what do, 11 what do the sections say, answer some of the 12 questions that we don't have answer for, and we 13 can take this up in the morning. 14 So, I'm going to turn it back to 15 Alan, because it is 5:29. And you're going to 16 get the hook here in 30 seconds. 17 MR. MAYBERRY: Yeah. Thank you. 18 Congratulations to everyone for 19 making it through day one and for bearing with 20 us on the new process. I think you've done 21 well. 22 I think it always starts out slow.

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1 So, let's be positive and say we're going to 2 get through this week and get through what we 3 have to do. 4 Tomorrow, after we get through the 5 unfinished business here, we do have patrolling 6 and leak survey frequency. So, it's something 7 you can, you know, take to bed and read, 8 perhaps. 9 And that's after you over the next 10 hour or so you talk about these, you know, the 11 items we have up here. No. 12 But, anyway, look forward to having 13 you back tomorrow. And I'll turn it back to 14 you, Mr. Chair. 15 All right. And with MR. DANNER: 16 that, in recess till 8:30 in the we are 17 morning. 18 Thank you all. 19 the above-entitled (Whereupon, 20 matter went off the record at 5:30 p.m.) 21 22

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Neal R. Gross and Co., Inc. Washington DC

CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Gas Pipeline Advisory Committee

Before: PHSMA

Date: 11-27-23

Place: Arlington, Virginia

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate complete record of the proceedings.

near A ans &

Court Reporter

NEAL R. GROSS

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