### U.S. DEPARTMENT OF TRANSPORTATION

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# PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

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## LIQUID AND GAS PIPELINE ADVISORY COMMITTEE JOINT MEETING

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## WEDNESDAY, OCTOBER 20, 2021

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The Advisory Committee met via Videoconference, at 10:30 a.m. EDT, Diane Burman, Chair, 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
- W. JONATHAN AIREY, Vorys, Sater, Seymour, and Pease, LLP

RONALD A. BRADLEY, PECO

- PETER A. CHACE, Public Utilities Commission of Ohio
- J. ANDREW DRAKE, PE, Enbridge Gas and Transmission and Midstream
- ROBERT W. HILL, Brookings County Zoning and Drainage
- SARA W. LONGAN, Alaska Department of Natural Resources
- SARA ROLLET GOSMAN, Pipeline Safety Trust; University of Arkansas School of Law
- TERRY L. TURPIN, Federal Energy Regulatory Commission

RICHARD H. WORSINGER, Wilson Energy CHAD J. ZAMARIN, The Williams Companies, Inc.

LIQUID PIPELINE ADVISORY COMMITTEE MEMBERS PRESENT

HON. DIANE BURMAN, New York State Public Service Commission

GRAHAM BACON, Enterprise Products Partners, L.P. DAVID BARNETT, United Association of Plumbers and Pipefitters

JERRY BARNHILL, DCP Midstream

BILL CARAM, Pipeline Safety Trust

TODD DENTON, Phillips 66 Pipeline LLC

ANGELA KOLAR, Colonial Pipeline Company

CHUCK LESNIAK, Watershed Protection Department

SHAWN LYON, Marathon Pipe Line, LLC

SARA MAGRUDER LYLE, Common Ground Alliance

JON WOLFGRAM, Minnesota Department of Public Safety

#### PHMSA STAFF PRESENT

ALAN MAYBERRY, Associate Administrator for Pipeline Safety; Designated Federal Official

AMY ALLEN, Technical Writer

TRISTAN BROWN, Acting Administrator

BYRON COY, Senior Technical Adviser for Program Development Division

TIMOTHY GAITHER, Director for Preparedness, Emergency Support and Security

JOHN GALE, Director, Office of Standards and Rulemaking

CHRIS HOIDAL, Senior Technical Advisor, Program
Development Division

BLAINE KEENER, Director, Operations Systems
Division

DAVID LEHMAN, Director, Program Development Division

CAMERON SATTERTHWAITE, Office of Standards and Rulemaking

RODRICK "ROD" SEELEY, National Safety
Coordinator, Pipeline Field Operations

MASSOUD TAHAMTANI, Deputy Assistant Administrator

SENTHO WHITE, Director of Engineering and Research

ALSO PRESENT
JOHN BLANC, API
SCOTT GORTON, Executive Director, Surface
Policy, Plans and Engagement, TSA
CINDY GRAHAM, Enbridge Inc.
JOHN HILL, Black Hills Energy
ELGIE HOLSTEIN, Environmental Defense Fund
DAVID MURK, American Petroleum Institute
CHRISTINA SAMES, American Gas Association
BRANDI WOLFE, WSB & Associate

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

10:35 a.m.

MR. MAYBERRY: We're going to go ahead and get started. Good morning and thank you for attending this joint meeting of the Gas and Liquid Pipeline Advisory Committees.

I am Alan Mayberry, the Associate

Administrator in the Office of Pipeline Safety at

PHMSA. And pursuant to the Federal Advisory

Committee Act I am the Designated Federal

Official for the Gas Pipeline Advisory Committee

and the Liquid Pipeline Advisory Committee and

will serve as the presiding official for this

meeting.

Our chairperson today for this meeting will be the Honorable Diane Burman, who is a commissioner for the New York State Public Service Commission.

Before I introduce some of our special guests and discus meeting protocols, I'd like to give you a brief safety moment.

As you may know, you know, we close

out in the waning days of October. The month of October is Fire Safety Month. In fact, it was proclaimed such by the President recently. And, as such, we're reminded of the need to be prepared and prevent the loss of life. It's a good reminder that also as we look to the time change in early November for most of us, that it's a good time to change the batteries in our smoke alarms.

And, in fact, also something I learned recently is actually if your smoke alarm is approaching ten years of age, it's time to replace. They typically only last ten years.

So, a good reminder to replace those if you have smoke alarms that are over ten years of age or older. Anyway, our safety tip really relates to fire safety. So, just remember to change your batteries.

I'd like to take an opportunity to extend a special welcome to new Liquid Pipeline Advisory Committee members.

We have Mr. Bill Caram, who is the

executive director of the Pipeline Safety Trust, and Ms. Diane Burman, who is commissioner with the New York State Public Service Commission.

In addition, I'd like to take this opportunity to extend a special thank you to former advisory committee members. Ms. Mary Palkovich, who is on the GPAC, Mary retired as vice president of Gas Supply and Engineering with Consumers Energy.

And then also Mr. Carl Weimer. Many of you have known Carl over the years, who was actually a member of our Liquid Pipeline Advisory Committee since -- going way back to 2004.

Carl, thank you for your service as well and I think you probably were one of the longest-serving members of our advisory committees and thank you for your significant contributions to pipeline safety.

As far as guests go, I'll be introducing my boss here in a moment, but I'd like to welcome Tristan Brown, our acting administrator, and he'll be introduced here in a

bit for his opening -- for the opening remarks.

Now, I'll go over a few housekeeping items to ensure the meeting runs smoothly.

First, you know, this is a virtual meeting. All participants will have full access or controls for providing comments.

While committee members have full participation access, public participants will be provided the opportunity to comment and ask questions at allotted times.

If you are not presenting or speaking, please mute your microphone to minimize disruptions.

If necessary, take a moment now to check if you are muted. Remember to practice good mute hygiene.

We ask that you hold any comments until we open the floor for discussion. For members of the public, when you are acknowledged, please limit your comments to two minutes or less. And when you are recognized to speak, please provide your name and affiliation.

If necessary, the chairperson may ask you to cut your comments short, keep the agenda moving.

You can also submit written comments under our advisory committee docket, and you'll hear this again as far as the docket number is PHMSA-2021-0069. That's the docket number.

Also, a transcript of the meeting will be available to the public in the public docket and the PHMSA meeting page two or three weeks after the meeting.

In an effort to maintain order and decorum and the schedule throughout the meeting, we ask that both committee members and the public adhere to these basic rules.

Please do not delay or disrupt the meeting, whether by conversing separately during proceedings or by causing other distractions. Do not interrupt speakers or presenters.

Please follow the instructions of the chairperson and myself, as the presiding officer, and please note that anyone who disrupts the

meeting will be disconnected. 1 2 That concludes our housekeeping items. I'll now hand over the meeting to our 3 4 chairperson, Commissioner Burman. Thank you so much. 5 CHAIR BURMAN: Can you hear me? 6 MR. MAYBERRY: 7 Yes. 8 CHAIR BURMAN: Great. Hello everyone. 9 My name is Diane Burman. I'm a commissioner at the New York State Public Service Commission and 10 11 I'm also a member of both the Gas and Liquid 12 Pipeline Advisory Committees. I'll be serving 13 today as the chairperson for this meeting. 14 I do want to thank PHMSA for hosting 15 virtually this important two-day meeting to 16 discuss critical issues related to pipeline 17 safety under these two committees. 18 In general, I believe when it comes to 19 pipelines and natural gas, a regulator's job, 20 whether it's at the state or the federal level, 21 is to ensure that the systems it regulates

remains safe and that we collectively all help to

continuously improve in that regard.

I believe that material safety improvements, responsible and flexible regulatory oversight, and industry and other stakeholder engagement can, and should, appropriately proceed together.

I hereby call this meeting of the

Joint Gas and Liquid Pipeline Advisory Committees

to order.

This meeting is being recorded and a transcript will be produced for the record. The transcript and the presentations will be available on the meetings page of the PHMSA website, primis.phmsa.dot.gov, and on the eGov docket on regulations.gov. The docket number for this meeting is PHMSA-2021-0069.

Before we get started, I have a few reminders for members, presenters and the public. Please remember to introduce yourselves each time you speak stating your name, your organization, as well as if you sit on the GPAC or the LPAC, so that your comments are properly recorded in the

1	transcript for this meeting.
2	Additionally, members should hit
3	"Raise Hand" on the Microsoft Teams to alert us
4	if they wish to make a comment.
5	I'd like to take this opportunity to
6	conduct a roll call. Amy, would you be willing
7	to do that?
8	MS. ALLEN: I'd be happy to. I will
9	now take the roll call for GPAC. If you are
10	present, please say "here" when I call your name.
11	Diane Burman?
12	CHAIR BURMAN: Here.
13	MS. ALLEN: Peter A. Chace.
14	MR. CHACE: I'm here.
15	MS. ALLEN: David Danner?
16	MR. DANNER: I'm here.
17	MS. ALLEN: Sara Longan?
18	MS. LONGAN: Good morning. Here.
19	MS. ALLEN: Terry Turpin?
20	MR. TURPIN: Here.
21	MS. ALLEN: Alright. Ronald Bradley?
22	MR. BRADLEY: Good morning. I'm here.

1	MS. ALLEN: Andrew Drake?
2	MR. DRAKE: Here.
3	MS. ALLEN: Richard Worsinger?
4	MR. WORSINGER: Good morning, and I'm
5	here.
6	MS. ALLEN: Chad Zamarin?
7	MR. ZAMARIN: Here.
8	MS. ALLEN: Jonathan Airey?
9	(No response.)
10	MS. ALLEN: Alright. Michael Balboni?
11	(No response.)
12	MS. ALLEN: Mark Brownstein?
13	(No response.)
14	MS. ALLEN: Sara Rollet Gosman?
15	(No response.)
16	MS. ALLEN: And Robert Hill?
17	MR. HILL: Here.
18	MS. ALLEN: Alright. And I will now
19	take roll call for LPAC. Jeffrey Lantz?
20	(No response.)
21	MS. ALLEN: Jon Wolfgram?
22	MR. WOLFGRAM: Here.

1	MS	. ALLEN:	Again, Diane Burman?
2	CH.	AIR BURMAN	N: Here.
3	MS	. ALLEN:	Graham Bacon?
4	MR	. BACON:	Here.
5	MS	. ALLEN:	Jerry Barnhill?
6	MR	. BARNHILI	L: Here.
7	MS	. ALLEN:	Angela Kolar?
8	MS	. KOLAR:	Here.
9	MS	. ALLEN:	Todd Denton?
10	MR	. DENTON:	Here.
11	MS	. ALLEN:	Shawn Lyon?
12	MR	. LYON: I	Here.
13	MS	. ALLEN:	Lanny Armstrong?
14	( N	o response	∍.)
15	MS	. ALLEN:	David Barnett?
16	MR	. BARNETT	: Here.
17	MS	. ALLEN:	Chuck Lesniak?
18	MR	. LESNIAK	: Here.
19	MS	. ALLEN:	Sara Magruder Lyle?
20	MS	. MAGRUDE	R LYLE: Good morning.
21	Here.		
22	MS	. ALLEN:	Bill Caram?

1	MR. CARAM: Here.
2	MS. ALLEN: All right. That looks
3	like we have 10 people for both GPAC and LPAC.
4	We now have a quorum. Thank you.
5	CHAIR BURMAN: Great. And I see
6	thank you so much Amy. John Gale, you have your
7	hand raised. Do you have a comment?
8	MR. GALE: Yes, Ms. Burman. Just to
9	let you know, Ms. Gosman let us know that she
LO	would be about an hour late to the beginning of
L1	today's meeting.
L2	So, she'll be joining us around 11:15
L3	to 11:30 today.
L <b>4</b>	CHAIR BURMAN: Okay. Great. Thank
L <b>5</b>	you. For those members who are on that may have
L6	stepped away from time to time, if you could
L <b>7</b>	please let us know when you do step away and then
L8	when you come back so we can properly account for
L9	you. Thank you.
20	Next, I'd like to review the agenda.
21	On your screen you should see the agenda. Do you

want me to go down through it, John, or do you

want to go through it? 1 2 MR. GALE: That would be great. Ιf you'd like, I can do it. 3 4 CHAIR BURMAN: Okav. 5 So, you know, after you MR. GALE: 6 guys are done with your introductory remarks, our acting administrator, Tristan Brown, will give us 7 8 some remarks followed by some comments from Alan. Alan will also touch on the recent oil 9 spill that happened out in California in Orange 10 11 County and give us an update on that. 12 I will then follow up with a 13 regulatory update -- giving a review and an 14 update to the members and the public of the 15 current status of our regulatory agenda. 16 Ms. Sentho White will then give us an 17 update on the status of our research and 18 development initiatives and what's going on in 19 that area. 20 Timothy Gaither, our director for 21 Preparedness and Emergency Support and Security,

along with Scott Gorton from TSA, will give us an

overview of pipeline cybersecurity issues.

Also, just a quick note. We haven't put into the agenda, members, any specific break times, but we -- or lunch times.

We figure we'll probably have a lunch break in the 1:30 to 2 o'clock timeframe depending on how the flow of the meeting is going, but individual breaks right now are not planned unless requested.

So, after the discussion on cybersecurity, Agenda Item 6 here will be an overview of the recent 2020 PIPES Act. David Lehman, our director of Program Development Division, will give us an overview of those issues.

And that will be followed by Agenda

Item 7, and our deputy associate administrator,

Massoud Tahamtani, will give us an overview,

along with John Hill and Cindy Graham, of status

of SMS.

And later on in the day Dave Lehman will come back and address industry performance

and incident history and give us an overview of that topic and then we'll close out the day.

It will be a long day. We're pretty sure we're going to really get close to that six o'clock timeframe and we're going to get an overview of some really important initiatives, especially those that were, you know, the result of work from these committees resulting from the gas transmission final rule and the hazardous liquid final rule that were published in October of 2019, and also will give an update on the implementation of Section 114, the self-executing requirement from the PIPES 2020 Act, that Byron Coy is leading for us there as well.

And that will give us a very full day and that will lead us into the next day to discuss our standards update rule. So, back to you, Ms. Burman.

CHAIR BURMAN: Thank you so much,

John. I appreciate that.

Now, we're next going to turn it over on the agenda to Alan Mayberry again, Associate

Administrator for Pipeline Safety. And thank you, Alan, for all that you do.

MR. MAYBERRY: Thank you, Madam Chair.

And, first off, what I'd like to do is just recognize the fact that, you know, a lot of work goes into conducting these meetings and I wanted to recognize the staff at PHMSA that went into this effort.

First, Mr. Massoud Tahamtani, who is our deputy associate administrator for Policy and Programs.

Mr. John Gale, whom you know well,
he's our Director of Standards and Rulemaking,
and then Cameron Satterthwaite in Standards and
Rulemaking are also instrumental in conducting
this meeting, as well as Amal -- Ms. Amal Deria.
She's in our office of Chief Counsel. Ms. Janice
Morgan, Ms. Amy Allen, Ms. Jenny Donohue. And
last, but certainly not least, Mr. Tewabe Asebe
also affectionately known as "TA."

We're very much appreciative of this awesome team we have here at PHMSA that brought

1	this meeting here to you today.
2	Now, I will one other item. Just
3	a note on the agenda, John and Madam Chair. We
4	may need to shift things around.
5	We'll see how the timing goes, but I
6	want to make sure we had a good conversation
7	around, in particular, Section 114.
8	So, we may need to shift things
9	around, but we'll keep an eye on the time as we,
10	you know, the day progresses.
11	So, with that, I think I'll turn it
12	back to you, Commissioner Burman.
13	CHAIR BURMAN: Thank you so much. I
14	think now you're going to introduce the PHMSA
15	administrator?
16	MR. MAYBERRY: Yes. Let me introduce
17	my boss, PHMSA's Acting Administrator.
18	ADMINISTRATOR BROWN: That was
19	perfect, Alan.
20	(Laughter.)
21	MR. MAYBERRY: Let me give you a
22	rightful introduction that's well-deserved. You

are Acting Administrator, you know.

Tristan most recently served as the legislative counsel for U.S. Senator Gary Peters. Before that, practiced law at Stinson, LLP, and Van Ness Feldman in their Washington, D.C. offices.

He also previously served as Deputy
Associate Administrator at the EPA focused on
congressional affairs.

Tristan earned his juris doctorate

degree from the University of California,

Berkeley School of Law, and a master's of

philosophy degree from the University of

Cambridge where he was a Gates Cambridge Scholar.

He also has a bachelor's degree from the Lee

Honors College at Western Michigan University.

Tristan hails from the State of Michigan.

And I'd like to welcome you and turn it over to Acting Administrator Brown. So, thanks for being here, Tristan.

ADMINISTRATOR BROWN: Thanks, Alan.

That last part was the most important part being

from the State of Michigan.

I'd love to spend the first few minutes individually thanking everybody on here. We already did the roll call both for, you know, all the folks who put the time in to make this happen today on Team PHMSA.

So, I'm going to skip individually thanking everybody, but do want to express it's a lot of work to put together these meetings and each one of you, I know, worked really hard and always does. And so, thank you.

And thanks and welcome to new members of the Pipeline Advisory Committees and to the existing members who I haven't met.

I think I've met most of you all virtually, a couple in person, but, you know, really just thank you for what you do, the work here.

As most folks on the call or meeting here know, the Pipeline Advisory Committees help ensure we get constructive, in-depth look at our rules and policies and help inform potential

challenges and opportunities to them. And really, help make sure we have effective rules to govern pipeline safety.

And so, I just want to thank, too, there's over a hundred and some odd -- 150 people on here. Most of whom are not on the Advisory Committees.

These are members of the public and I saw a lot of friendly faces on here who advocate for pipeline safety, who work in this space and who have a common goal of pipeline safety. So, thanks for joining us today, and over the next few days, for this really important work.

I'm going to skip over the intro. I'm from Michigan. John already covered that.

That's most important.

I did, you know, serving on the staff of the now chair of the Senate Commerce, Science and Transportation Committee on -- Subcommittee on Surface Transportation and previously in the Senate Environment and Public Works in this energy environmental space and practicing in

regulatory law, I love talking regulations, reading them.

I know that's probably a small subset of the country that actually is interested in those sorts of things, and most of them are on this call at least from the pipeline world.

So, I'm grateful for your participation and insight both from the members here, but also the public.

Your insights really do help us perfect our work and -- or at least our common mission to try to perfect it. So, thank you.

On the pipeline side of the agency, you know, most of you know we've been responding to the incident in Southern California that fouled beaches and harmed wildlife throughout the region.

We deployed one of the largest teams we have ever sent to an incident and our team continues to work closely with the U.S. Coast Guard, NTSB, BSEE and state agency in the recovery efforts there.

While the incident remains under investigation, it was a vivid and tragic reminder of the need to do all we can to ensure that pipelines operate safely and without releases into the environment.

That's what we've focused on today, that's what we're focused on every day and thank you for your input in that space.

With new leadership under Secretary

Buttigieg and the Biden-Harris Administration,

we've been focused on building back better

through infrastructure investments, maintaining

and strengthening our safety mission and adopting

a whole-of-government approach to climate change

mitigation, environmental justice and equity.

And as you, you know, last year with broad bipartisan support, Congress enacted a major new pipeline safety bill, the 2020 PIPES Act, which provides an opportunity to make progress on all of these fronts.

So, while PHMSA's mission of safety and environmental protection had largely not

changed in nearly a half century, this new law explicitly expands our mission related to protecting the environment, and this being one of dozens of new provisions and mandates in that law.

With respect to greenhouse gas
emissions, specifically methane, Congress was
very clear that we must not just reduce these
emissions, but we must do all we can to minimize
these emissions.

So, under Section 112 of the PIPES

Act, Congress requires PHMSA to prioritize

completion of rulemakings on gas transmission and
gathering pipelines.

This is certainly at the top of our rulemaking agenda along with the Valve

Installation and Minimum Rupture Detection

Standards final rule.

We anticipate movement of these rules in the coming weeks and months, and thank you to many of you both on the committees and from the public for your input.

Those are five to ten years in the making and some of you, I know, have contributed to helping us craft those rules over the years.

Section 113 of the PIPES Act requires that PHMSA issue final regulations requiring certain classes of operators to conduct leak detection and repair with regards to methane in order to meet the need for gas pipeline safety and protect the environment. I alluded to that earlier.

Another PIPES Act mandate, in Section 114, is to the minimization of natural gas through pipeline facilities.

This is a tremendously important selfexecuting provision of the law that operators are required to comply with this year.

You probably PHMSA issued an advisory bulletin back in June to all pipeline facility operators underscoring these requirements to minimize methane emissions on their systems.

And the advisory bulletin also directs pipeline operators to update their inspection and

maintenance plans to address the elimination of hazardous leaks, which operators are directed to -- and that's fugitive and vented emissions and they are to address replacement or remediation of facilities that have historically been known to experience leaks.

Starting next year, PHMSA and our state partners will be enforcing that requirement.

The Leonel Rondon Pipeline Safety Act, also included in the PIPES Act of 2020, requires a focus on gas distribution regulations and will place a substantial onus on state programs to ensure compliance.

The rules transpiring from these mandates are expected to apply to operators of more than two million miles of gas distribution pipelines throughout the country.

According to the statute, the rule is to focus on managing overpressurization risks on low-pressure systems, aging infrastructure, and operator practices.

These are just a few first steps. Not only do we have to work to reduce greenhouse gas emissions and to make sure that nearly three million miles of pipelines are safe to transport current energy commodities, but we need to look to developing and building an infrastructure to transport fuels of the future.

Moving forward, we're considering these mandates in conjunction with our rulemaking and agency decisions and how they will affect future generations and specifically communities that have traditionally been overlooked and underrepresented.

The Administration's whole-of-agency approach to environmental justice intends to ensure that those who are most vulnerable are considered in the work that we all do in addition to being dedicated to maintaining a strong focus on using transportation as an engine for equity.

With all these rulemaking activities, we look forward to the Committee's constructive deliberations to ensure our rules are most

effective in enhancing pipeline safety and protecting the environment.

And while PHMSA continues to advance pipeline safety through our training, regulation, inspection, enforcement, many of the root causes of incidents are best addressed through R&D and technological innovation.

So, we've got at the end of November, an upcoming research and development public meeting, which all of you are invited to and hope everyone participates in. It will be focusing on hydrogen and other R&D areas.

As we look to help position the energy sector, and our nation, to adopt the infrastructure of the future, we hope to engage with stakeholders on new technologies and efficiencies.

This includes upgrades to allow for the transport of hydrogen and other renewables to support our growing economy and to create goodpaying American jobs.

I'd be remiss if I didn't mention and

didn't highlight again the need for increased vigilance of cybersecurity threats.

In light of the Colonial Pipeline system hack earlier this year, the Biden-Harris Administration, including all levels of the executive branch, is working to ensure that the appropriate cybersecurity measures are in place and that the industry is taking this threat very seriously.

PHMSA's role includes coordination with TSA, and other federal agencies, to ensure there is a collaborative and efficient approach to monitoring, inspecting and promulgating regulations related to cybersecurity.

During these meetings, you'll discuss the NPRM, Notice of Proposed Rulemaking, for the Periodic Updates of Regulatory References to

Technical Standards and Miscellaneous Amendments

-- really need an acronym for that one. That was published earlier this year.

I encourage you to take advantage of our time together to offer your valuable input

and help address rule changes that will meaningfully enhance safety and protect our environment.

In addition to voting on rule changes, you'll also hear lots of updates on what we're working on. Some of which I've touched on today.

I love that the agenda is perfect. No breaks, wall-to-wall work and coverage to advance pipeline safety. That's what we are focused on and just so grateful for everybody's efforts today.

We've got a lot of interesting topics today, but I just want to reiterate the special thanks to the PHMSA team members who make it all happen every day and welcome and thank you all.

Keep up the great work and I'll let you get to it now.

CHAIR BURMAN: Great. Thank you so much, Administrator Brown. I appreciate that. I very much like that you're focused on how we can collectively work together on advancing pipeline safety and the protection of the environment and

getting under the hood.

This is the first time that GPAC and LPAC are meeting now under the current administration, and GPAC and LPAC have really been very good technical advisory committees to serve as peer review for all of the Department of Transportation PHMSA-proposed safety regulations and work together in helping to advance the cause on collectively improving on pipeline safety.

With that, I'm going to turn it back to Alan, if you have some other remarks or thoughts?

MR. MAYBERRY: Certainly. Thank you,
Commissioner Burman. And also thanks, Tristan.

I appreciate your remarks and thanks for, you
know, being here with us today.

We have several speakers. As Tristan covered some of the topics, you'll hear a lot more detail coming forward here today, and then also I wanted to second your remarks about the good work of the advisory committees.

We rely on you and we value your

advice. And so, very much appreciate your -- the service you provide and also the flexibility you have working with our team.

And, of course, as Tristan had mentioned, your commitment to pipeline safety. So, a very big thank you to all of you.

As Tristan covered, and as you see by our agenda, there is a lot going on. There's a lot going on that you will not hear about just due to the nature of our comprehensive program that we, you know, it's just a lot of moving parts.

I did want to highlight a couple of items of note that aren't on our agenda but that I think you'll find of interest.

First off, yesterday we sent a note out to many of the stakeholders regarding a recent OMB approval of our revised gas transmission annual report. That was good news.

It was approved on October 12th and that approval and, you know, subsequent changes to that annual report is crucial to collecting

the right data relevant to the 2019 Gas

Transmission Rule, that final rule we issued back
in 2019.

And then there will be instructions on the website in the coming week or so, and so you'll be seeing that updated, but it will cover for calendar year '21 and it will be, you know, the due dates are as you've seen before in early-2022.

And then -- but all other aspects of the former instructions are currently, you know, as they have been on the website. So, that's one item I wanted to make -- call your attention to.

The others, you know, in the realm of -- again, in the realm of information collections, as you may or may not know, that's a huge process for us as we comply with the Paperwork Reduction Act and collect information from the regulated community, but we're also working on some other changes that you'll see in the coming year in 2022, I expect, but related to improving the granularity of excavation damage,

root cause data and incident reports.

We're going to make changes to the incident reports that will more closely match the latest edition of the Common Ground Alliance's Damage Information Reporting Tool, or DIRT.

I think that will help add consistency and, you know, provide -- be much more easier to compare data related to causal and gets us all comparing apples and apples rather than the current difference where we have apples and oranges between, say, the DIRT data and our incident data.

We also plan changes -- similar changes on the gas distribution annual report as well as -- well, the other annual reports as well gathering gas transmission and hazardous liquids. It's related to that. Just a couple of updates on that I just wanted to point out.

And if you have questions on that as we get going on the agenda, perhaps, you know, when we're talking about data, if you have any questions, feel free to pipe up then.

Let me shift gears here a bit before

I wrap up and just give you an update on the

offshore spill that we responded to recently in

Southern California.

Tristan gave a good summary of the incident, but basically, as you know, I'll just say quickly it occurred on October 2nd in the wee hours of 2:30 a.m.

We responded, like Tristan said. The largest group we've had deployed to an incident in recent years, probably in at least ten years.

The initial estimates of the release were about 3,000 barrels of crude oil coming from a platform off the coast of California.

More recent estimates, it's been reduced down to about 588 barrels, which is just under 25,000 gallons.

Shortly after the incident, on Monday, October 4th, we issued a corrective action order to put controls under the operator and related to the pipeline and prevented it from being put back into service until PHMSA is satisfied in the

safety of that line and the risk of recurrences is eliminated.

And so, that will continue to be shut down, you know, as we work through our investigation and we await federal investigations and state investigations that go on.

As you may know, for an offshore spill the U.S. Coast Guard is the federal on-scene coordinator and we continue to work closely with them, as well as the National Transportation Safety Board, which initiated a marine investigation.

And our partners with Bureau of Safety and Environmental Enforcement, or BSEE, under the Department of Interior, that basically owns the right-of-way in the outer Continental Shelf, we're working closely with them as well.

As of right now, our investigation continues. I think currently there are, you know, various investigations focused really right now with the FBI and the NTSB looking at pipelines, but before too long it looks like the

site will be turned over to the operator. 1 2 We'll do an investigation for cause. In parallel with that, we will also do an 3 4 investigation for compliance. That's typically how it works. 5 an incident happens, we have two loops that are 6 7 running. 8 One is the investigation loop itself 9 for causal factors, and then the other is the investigation -- or, yeah, investigation for 10 11 compliance with pipeline safety regulations. So. 12 that will continue. I wanted to make note that we are 13 14 planning to issue an advisory bulletin to the 15 industry -- to all the industry. 16 Not just the liquid industry, but to all to be aware and to be mindful of the risk of 17 18 anchor drags and other external forces on 19 pipelines located offshore and other waters. 20 This could also affect, say, an anchor 21 zone on the Mississippi River, perhaps, or other

locations where there's a risk of anchor drag.

1 So, we'll be issuing a reminder of 2 operators to be aware of that risk and to take action needed to mitigate the risk and prevent a 3 failure, which is really what we're all after. 4 5 These types of accidents are very 6 unfortunate, they are unacceptable, but we need to do all we can to learn from it and prevent the 7 8 next accident from happening. 9 That concludes my remarks. I'll turn it back over to the chair and, again, thank you 10 11 for being here and I look forward to the 12 discussion today. 13 And, by the way, as you saw from the 14 agenda, today is mainly a policy-level 15 discussion, updates for you that I think you'll 16 find helpful. And then tomorrow we'll have -- the 17 18 agenda basically covers rulemaking that we'll be 19 voting on. So, with that, I'll turn it back to 20 you, Diane. 21 CHAIR BURMAN: Thank you so much,

I appreciated that.

Alan.

1 Before we go to the next -- Agenda 2 Item 3, I did want to open it up if anyone on the Committee wanted to make some brief remarks or 3 4 comments or ask questions as it relates to what 5 we've so far heard. I'm going to look to see if anyone has 6 7 their hand raised. I don't see that. And I will 8 open it up briefly if there's anyone who's in 9 attendance who's not on the Committee now, now that no one on the Committee has anything. 10 Ι 11 don't see anyone's hands raised. 12 So, with that, I'm going to turn it 13 over to John to do a regulatory update. 14 you. 15 Thank you, Ms. Burman. MR. GALE: Ι 16 saw a hand raised for a second, but it must have 17 went away. 18 Dave, do you have a question? 19 CHAIR BURMAN: Actually, it's back. 20 We are --21 MR. GALE: Elgie has a question. 22 CHAIR BURMAN: Elgie, yes.

MR. HOLSTEIN: Yes, very quickly.

Elgie Holstein, Environmental Defense Fund. Not so much a question as just to thank the acting administrator for his remarks and for pointing out what we hope will be the initiation of a new era for PHMSA and for the advisory committees, which is the fact that the PIPES Act elevates the role of the Agency in the environmental mission.

And while we felt that -- in the environmental community that that mission existed before, the PIPES Act clearly states Congress' intent that the Agency should be involved.

And I know the staff is aware of that, but we wanted to emphasize that for the benefit of the members of the advisory committee.

It's a very welcome and, I think, at the same time, a very challenging thing. We look forward to working with all of you on making that a success. Thank you.

CHAIR BURMAN: Thank you, Elgie. And if you can just take down your hand now -- great.

Appreciate it. Thanks for your comments.

Now, I'll turn it back -- and seeing no one else, John, thank you.

MR. GALE: Thank you, Ms. Burman.

Yeah, hi, everyone. My name is John Gale and I'm
the Director of Standards and Rulemaking in the
Office of Pipeline Safety. And what I'm going to
do today is give you an update on our regulatory
agenda.

In my opinion, it's a very exciting time in the regulation world in the Office of Pipeline Safety.

Not only do we have four different final rules getting to the end of their life cycles here where they're going to be published as final rules, I'll be fairly optimistic, in the next couple of months, on valves -- remote control valves and automated valves, to gas gathering, to the definition of a USA for hazardous liquid pipeline, and also improvements in the gas transmission side of the house.

We're also working on some very exciting rulemakings dealing with methane

reduction in our leak detection rule, and important safety issues related to gas distribution that were identified following the Merrimack Valley incident.

So, you know, those are initiatives that are right in the forefront, right in front of us right now that I see happening here in the next several months.

One of the things that are -Administrator Brown has told me I need to work on
my optimism a little bit, and I'm able to do that
mainly because I am seeing actions and things
moving quite quicker than we have in the last
several years.

So, I'm quite optimistic that we're going to have some action here on this regulatory agenda both in the final rules and for proposals that myself and my team will be ready and willing to bring forward to these advisory committees.

So, exciting times in the rulemaking world in pipeline safety.

So, with that being said, what I'm

going to do is I'm going to be the first presenter that's going to use PowerPoints. sorry about that.

I'm going to go ahead and share my screen and I'm actually going to -- I'll go ahead and take the video off as well. Just bear with me here.

(Pause.)

MR. GALE:

CHAIR BURMAN: We can see the screen now, John.

Thank you. Alright. So, we'll just go ahead and jump right into it.

Great.

One of the things I want to discuss with you guys first is some of the changes that have occurred to our regulatory agenda because of the PIPES Act of 2020.

One of the things that occurred, you know, it's one of the things that occurs every time we have a new -- a re-authorization bill passed, is we have to take a look at it and see how does it impact our regulatory agenda.

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And so, based on that review, we've identified the need to create three new rulemakings.

One I mentioned already, which is our leak detection rulemaking. We'll get into it a little bit more later.

We also initiated a rulemaking of gas distribution issues dealing with basically the second part of our act in the Leonel Rondon part of our re-authorization bill, and also one on idle pipelines.

There's a couple other miscellaneoustype changes that were part of the bill that were
self-executing in nature and we'll identify the
appropriate rulemaking vehicle for those moving
forward, things like safety-related condition
reporting and the like.

They didn't deserve or kind of raised the level of the need for a separate look, but basically we've initiated three new rules and we have identified a couple other changes we have to manage over the next several months.

So, right now, with those three rules, we have about 13 rulemakings that we're currently managing.

Also what's important to note, too, is that there was a change in what's called the PIPES Act chart -- or at least what we like to call the PIPES Act chart.

And this is a chart -- a list that we put on our website that actually came about from the 2016 bill where we basically show a schedule for the rulemakings that are congressionally mandated in nature, right?

So, we basically show a generic schedule of when we thought it would be published.

On the 2020 bill, that was changed from a requirement to update that chart every 90 days to actually update that chart every 30 days and not just show a general schedule about how the rule was at PHMSA, but actually the steps that it's going through not only with PHMSA, but with the Office of the Secretary and with the

Office of Management and Budget, because basically a rule has three major steps in its life cycle when it goes through notice and final rule and the like.

It's going to go from PHMSA, to the Office of the Secretary, to the Office of Management and Budget.

And basically after the Office of Management and Budget, it's going to go to the register.

So, on the next slide here, I know it's maybe a little hard to see, it's very fine print, but the website -- we'll make sure that everyone has access to the website. It's in the presentation. You can see it.

It's not on the forefront of our website, but it is there with a little digging, but it can show you where these rules are at.

Right now, like I mentioned earlier, we have three final rules that are in OST and one final rule that is currently in OMB.

It also shows you our schedule, so you

can see where we're putting a lot of emphasis and where things are moving.

And, again, we have to update this every 30 days. So, it's really something that you can use to kind of keep active of where things are in the rulemaking in its life cycle and it's, in my opinion, very valuable information.

Of course, one of the most important steps in the rulemaking is when we have to bring our rulemakings to our advisory committee.

And right now, we have issued three notices, or Notices of Proposed Rulemaking, that still require action by the Advisory Committee.

One of them is the rule we're going to discuss tomorrow, which is our Standards Update Rule, but we also have two other rules.

Our class location NPRM was published.

And if we're going to move forward with the final rule, the next step would have to be an NPRM.

And the same with what we refer to as our Hazardous Liquid Regulatory Reform Rule,

which has had a new name change. We'll discuss that later, but those two rulemaking actions require actions be brought forward to the advisory committee.

And basically what we're looking at right now in terms of our scheduling, you can kind of glean it a little bit again from that PIPES Act chart that we saw before.

Our office right now, based on the direction of Mr. Brown and from Alan, you know, we're putting a lot of emphasis on the safety rules that are in front of us.

We put a lot of emphasis on the valve rules, lot of emphasis on gas gathering, RIN 2 and the USA rule and, in addition, the new rules that are coming forward on methane reduction and gas distribution.

And as soon as we can have the actions or the progress on those six rules, we're then going to be able to pivot back to things like class location, reg reform and some of the other initiatives we have in front of us, but right now

we're using our resources on those other six safety rulemaking actions that we're trying to move.

So, hopefully -- I'm pretty optimistic that even by, you know, early to mid-next year we can have some advisory committee work being done on our class location and our hazardous liquid reg reform notices.

Now, we get into the specifics of the agenda. The first two rules I'm going to talk about are what we refer to as RIN 2, or the second half of the gas transmission rule, and our gas gathering rule.

As you all recall very clearly, at least from the GPAC, the gas transmission rule that was published back in April of 2016 was split into three separate actions. We called them RIN 1, RIN 2, RIN 3.

There was one time I know somebody
liked to call them Thing 1, Thing 2 and Thing 3,
but RIN 1 was the rule that we posed back on
October 1st, 2019, that responded to the --

basically the congressional mandates that that rulemaking was addressing.

And then RIN 2 was the additional gas transmission improvements that we were looking to implement that were not necessarily congressionally mandated. And then of course RIN 3 was gas gathering.

So, what I'm going to do is give you an update now on really the status of where RIN 2 and RIN 3 are at. So, RIN 2 is that aspect of the gas transmission rule that deals with impaired criteria for both HCAs and non-HCAs.

There was a requirement in RIN 1, the first gas transmission rule, to require assessments outside of HCAs, right, we called it the moderate consequence areas, but the repair criteria component of that is a very important part of that whole process. So, it's really important that we can finalize that.

We have -- there's a proposal in there dealing with extreme weather inspections, which was a similar issue or proposal that was in the

hazardous liquid final rule, you know,
requirements in there on corrosion control,
management of change, ion clarifications and a
variety of other proposals.

And this is a rule, again, it's currently in OST and I'm quite optimistic that, you know, and you'll see in the PIPES Act chart that we're shooting for -- is that that final rule will be published sometime in early 2022, but right now that rule is currently in the Office of the Secretary.

The last part of the gas transmission original proposal was RIN 3, or the gas gathering proposal.

And this was a proposal that originally dealt with requirements related to incident reporting, annual reporting for all gas gathering lines, definitional issues regarding the end of production and the beginning of gas gathering -- or the end of gas gathering, sorry.

And then also regulations -- appropriate regulations for those high-hazard --

or high-diameter, high-risk lines, high-pressure lines, and we thought that we needed a specific set of regulations to address their safety concern.

So, this is a rule that's gone to the Advisory Committee, that we've drafted the final rule, and this is the final rule that's already at OMB and this is why I'm -- Mr. Brown has me a little bit more optimistic.

This rulemaking went through the Office of the Secretary in a little less than three months and has only been in OMB a couple months. So, and we're fairly optimistic right now that that rule will be finalized here near the end of the year, if not sooner.

So, you're seeing proof that these rulemaking actions are moving at a pretty fast pace, relatively speaking, over the last several years.

So, with the rulemaking, again, we had a lot of discussion at our advisory committee.

There was recommendations from the advisory

committee on how we should address things like the definitional issues, where the cutoff points should be on regulating gas gathering lines and what should those regulations be. So, you know, we're hopeful that we'll be publishing that rule here shortly.

Another rulemaking that's a very important rulemaking that we've been working on for several years, has its impetus back, you know, from the horrific incident in San Bruno, California, and the 2011 PIPES Act, is our rupture detection and valve rulemaking where we're looking at requiring installation of automatic shutoff valves or remote control valves on newly constructed or replaced natural gas transmission in hazardous liquid pipelines six inches in diameter or greater.

Again, this is a rulemaking that has gone through our advisory committee. We had a lot of discussion on the definition of "rupture," the timing of the remote control valves and how quickly they can close -- how quickly they should

close to protect the public in the event of a rupture occurring in those areas.

So, again, this is a rulemaking that has already moved to the Office of the Secretary and the next steps forward will be the Office of Management and Budget. And then hopefully, you know, we'll be seeing this final rule being published here sometime in early 2022.

Another rulemaking activity that we have ongoing, it was an NPRM that was published in the end of 2020, deals with class location requirements.

And this is an issue we've been looking at for a number of years. As many of you are well aware, we've been issuing special permits for going on 20 years almost now dealing with situations where the class location for a gas transmission pipeline changes and what has to happen to the MOAP of that line, you know.

Basically the regulations allow an operator to replace the pipe, reduce the pressure, but, in many cases, what an operator

will do sometimes will come in for a special permit.

And for these 20-some years, we've come up with a set of conditions that we believe, you know, provide an equivalent level of safety for the operations of these pipelines with these classification changes in lieu of pipe replacement, in lieu of pressure reduction.

So, the idea of this rule would be to adopt those types of requirements into the regulations in a general sense versus a requirement to come in for a special permit every time that an operator is looking to do this.

So, again, this is a rule that we published the NPRM, we published our proposal, the comment period is closed and our next action is to have an advisory committee meeting.

And actually it actually states in our 2020 act, that we are to have that advisory committee on this proposal, and, again, we have every intention of doing so, but right now we're just focusing on those safety rules that are in

front of us that I mentioned earlier.

Another rulemaking that we've been working on for a number of years now is updating our LNG regulations in Part 193.

As many of you are aware, right, with the change in gas infrastructure in our nation, we've gone from importing natural gas, or LNG, to exporting LNG and our regulations need to catch up.

So, we know we need to update Part 193 to take a look at the newest edition of NFPA 59A to address the issue of export facilities.

And also, we have some specific requirements from the PIPES Act of 2016 and 2020 to address dealing with, for example, process safety management-type thoughts for O&M activities and for dealing with small-scale facilities as directed in the 2016 act.

So, again, we're putting our resources into this, this is a fairly large undertaking, but we're -- right now, you know, we're emphasizing those six other rules we discussed

earlier, but we're fairly optimistic that we can hopefully get an NPRM out on this activity sometime in 2022.

Now, the point of tomorrow's meeting, right, is our standards update. We've been working hard, you know, getting some of these safety rules out that have taken, you know, in my opinion, too long, but, you know, they are starting to come to the end. But because of that, our standards have not been kept up to date as we would like.

And we've seen comments -- or we've heard comments from members in the industry and others saying, you know, we've got to -- we need to do a better job, and we are trying to do a better job.

We've actually initiated two separate rulemakings related to standards update. The one we're going to talk about tomorrow which deals with 20 or so of those standards, and a Standards Update II, which deals with another 20-plus standards.

And also, and more importantly, we believe we have a system in place that will allow us to get the reviews done, right, because we can't just rubberstamp these, and we don't rubberstamp these, you know.

We have the experts that can review the standards, give us a recommendation, follow the processes that are in front of us from the Federal Register, from the ATA, and also Section 24 regarding availability, and to get those rulemakings moving forward.

Now, a change that has occurred under this administration that we had to follow under the last administration was regarding the review.

As I mentioned before, the rulemaking cycle normally is, you know, PHMSA, to the Office of the Secretary, to the Office of Management and Budget. Well, that's for what's called a "significant rulemaking action."

Most of our rules, right, are usually significant rulemaking actions, but standards are what's called "non-significant rules." Well,

under the last administration, a non-significant rule had to go to -- just from PHMSA, had to go to the Secretary's office, then we could go to the Federal Register, basically.

Under this administration, it's looking like we're not going to have to do that at all. As soon as it clears PHMSA, we can then move forward to the Federal Register pretty quickly. So, that changes the course.

We will then be able to move a lot quicker on issuing the NPRMs, issuing the final rules and getting our standards up to date like we said we want to.

And also, just to be very clear regarding what we call the Section 24 provision, which is the issue regarding availability of standards, we have a provision in our statute now, it's been around for several years, where we're not to adopt any standards unless we can make them available. And just to be clear, we will not do that.

Any standard that we propose, any

standard that we will adopt, we will make it available to the public for free.

sometimes -- in most cases, that's going to be on the website from one of the SDOs, but, in some cases, for those SDOs that don't provide them, we will provide hard copies and we're going to work on improving our process for getting those out to the public, make sure they're aware of how the process works, but most importantly we're going to make sure that everyone has access to those documents free of charge so they can participate in that administrative process.

The next rulemaking I'd like to discuss is what we call the Liquid Pipeline Regulatory Reform Rule. It's a rulemaking we initiated a couple years back. NPRM published in April of 2020.

We've decided to change the name of it. We've changed the name kind of similar to what we did with the old OQ rulemaking and the name would change to the Oil Spill Response

Plans, Accident Notifications, Inspections and Investigations and other Miscellaneous Pipeline Safety Changes.

And basically this is a rulemaking that deals with things like submitting confidential information to PHMSA, some changes to the Part 194 response plan requirements, accident reporting change.

This is the change that was very similar to what occurred in the gas reg reform rule regarding the monetary threshold for accident reporting or incident reporting on the gas side.

So -- and then last, but not least, was the remote monitoring of rectifiers, which is also a similar provision from the gas reg reform rule.

Again, the next action on this is to have a PAC meeting and we're optimistic we'll probably be having that PAC meeting sometime mid of next year.

A rulemaking also that's been around

for a couple years, it had its impetus back in the 2016 bill, but because of a change in the 2020 bill, we're looking at moving it from an NPRM, or a Notice of Proposed Rulemaking, all the way up to an interim final rule.

And basically this is a rulemaking that would have us change the definition of the USA in Part 195, which has the impact requiring which lines are covered under integrity management -- what liquid lines would be covered under integrity management.

So, we would expand the definitions to include coastal beaches, marine coastal waterways and the Great Lakes.

But I just want to point out, as many of you are well aware, we recently updated the NPMS by reclassifying the Great Lakes as a USA already.

So, though this would codify that provision into Part 195, we would also be bringing in all the coastal beaches and the marine coastal waterways.

And again, this would be an IFR. This is a rule that is currently in the Secretary's office and we're fairly optimistic this will be moving to OMB and then, you know, hopefully to the Federal Register shortly thereafter.

And so, though it's an interim final rule, there will be a comment period and we'll have to respond to those comments, but it is a way of moving much quicker on this action given the fact of the very specific language that was in the PIPES 2020 bill.

Another rulemaking I want to discuss is our Hazardous Liquid Repair Criteria. As I mentioned earlier, you know, with RIN 2 the importance of updating the repair criteria for both high-consequence areas and also for those areas that are newly covered.

One of the provisions that was both in the liquid final rule in October and the gas final rule was to expand the areas that require assessment.

And under the liquid side of the

house, that expansion was pretty great. We went from about probably our estimate from 45 percent or 46 percent coverage to almost 90 percent coverage of lines that are required to be assessed.

But what we haven't adopted yet, we haven't updated the repair criteria, we haven't adopted a more specific repair criteria for those liquid lines that are now covered.

So, this is a rule -- part of the provisions of the original final rule, but, for a variety of reasons, it was pulled out of the regional liquid final rule that was published in October of 2019. So, we would reinitiate this action.

We're hoping to propose this year sometime, my hope, within the next, you know, 12 to 18 months.

This is a very important safety initiative that we have to keep moving on and Alan Mayberry has been very clear in his direction that we have to move on this. And so,

hopefully we'll be moving on that sometime in 2022, maybe early-2023.

Now, a couple of the rulemakings that we have going on because of the PIPES 2020 bill.

The first is our leak detection rule, right?

And what I like to look at this rule is balancing rulemaking action and we're looking at different things.

It really brings up our whole thoughts on -- and I call it a methane reduction strategy because as the team that we've put together, and it's a great team, in my opinion, that we put together to address this issue, we're not looking at things just simply within PHMSA jurisdictions.

We've had great relationships, great conversations with our counterparts at EPA.

We've had great conversations with lots of other different people trying to come up with ideas and areas that we think are pertinent to look at when it comes to reducing the methane footprint from pipeline infrastructures.

And so, we look at it as a strategy

more than so than a rulemaking, but some of the changes we're looking at, you know, we're looking at things like the frequency of leak detection surveys, we're looking at the repair criteria associated with those surveys, and of course we're looking at the equipment that is used to perform those surveys so that we can really start affecting better raw methane footprint.

And also when you get into looking at leak detection strategies, you get into what's called fugitive emissions and vented emissions.

And fugitive emissions, a lot of times people look at, are those with emissions that are unintentional in nature versus vented emissions could be those that are intentional in nature such as things from blowdowns and the like.

So, you know, we're looking at some of the issues related to that. Luckily for us, you know, we began this initiative.

There's a lot of good data from EPA that we could look at, get an idea of where the risks are, get an idea of where the concerns are

because that's where we really need to focus and that's been very beneficial.

But in addition to that rulemaking action, there's a provision in 114 to take a look at, you know, additional areas of methane reduction especially in the construction of pipeline infrastructure and if improvements can be made there.

And so, in addition to the rulemaking we've initiated in response to Section 113, we're going to be kicking off a study to take a look at how those changes to that infrastructure can have an impact on those methane emissions as well and, if appropriate, may be having to initiate a rulemaking action on that area as well.

And, of course, we had our Leak

Detection Advisory Bulletin that was published

back in June, we had a public meeting, I believe

that was back in May, and we're very optimistic.

And believe me when I say, you know, it's a very high-profile project that has direct attention of our administrator and I'm very

optimistic that we're going to be publishing something here by mid of 2022, and hopefully having that advisory committee action before the end of 2022, to move forward on this very important safety initiative.

Another rulemaking that we have ongoing because of the PIPES 2020 bill is our gas distribution rule.

One way to look at things, you know, over the last ten years or so, is we've had major initiatives rulemaking-wise on gas transmission, major initiatives-wise on hazardous liquid pipelines, we have our LNG rulemaking, you know, and this is taking a look at what provisions of our gas distribution infrastructure, what areas do we need to take a look at and improve on to improve safety given the fact that we had the incident in Merrimack Valley and the provisions that are in that 2020 bill.

So, we're looking at things like provisions related to -- from Section 202 of the bill related to DIMP plans, Section 203 of the

bill related to emergency response plans, amendments related to operations and maintenance because of Section 204 of the bill.

And then in Section 206, there's a variety of changes from records and -- certain records to be retained, presence of qualified employees in certain circumstances, and the safety of district regulator stations.

So, again, this is a very important initiative that we have ongoing. Dave Lehman, from our office, when he talks about the 2020 bill, he'll be talking a little bit more about this -- these provisions and a little bit more on the leak detection rule.

And a little bit later, Byron Coy will be giving us a presentation on the self-executing provisions of Section 114 related again to those methane reductions. So, a little bit more to come on these two areas as we go on through the day.

And last, but not least, the last rule

I was going to discuss is our -- what we call our

Operational Status Rulemaking, or Idled Pipelines.

And you guys are aware, there's basically two status. You're either abandoned or you're operational.

The idea here is should there be kind of a third, middle category of pipeline that should be identified and then have it, you know, take a look at what kind of requirement should be in place while these pipelines, you know, are in this idle status, but also, more importantly, not only what you could take a look at as what should apply, then we, most importantly, too, what requirements should apply if these pipelines move from a idle status back to active status.

So, this is an activity that's a mandate from the 2020 bill, it's in our regulatory agenda, and as soon as we can get movement on some of these safety bills, safety rule-making actions, you know, we'll be putting resources that comply with this mandate from the 2020 bill.

1 So, with that being said, Ms. Burman, 2 that concludes my presentation. I'd be willing to take any questions, if there are any. 3 4 CHAIR BURMAN: Thank you so much. 5 There was a lot in that. MR. GALE: 6 Yes. 7 CHAIR BURMAN: I appreciated your due 8 diligence in going through that. I do see that 9 we have one person so far. Let's see. Ron and 10 then Andy. 11 Ronald? 12 MR. BRADLEY: Yes, ma'am. Very good. 13 Thank you. Thank you, Madam Chairman. 14 Bradley from PECO and also the Gas PAC. 15 So, John, man, that was a lot. 16 MR. GALE: I'm a busy man, Ron. 17 a busy man. 18 MR. BRADLEY: Yeah, you are, man. 19 James Brown might not be able to outdo you, but I 20 am also optimistic, you know. 21 Having served on this PAC, I've got 22 such respect for those -- the members of the Gas

1 And I have not obviously worked too much PAC. 2 with the Liquid PAC, but it's just great seeing the efforts to advance safety in environmental 3 4 protections. 5 And it's great to see that they're moving forward, John, and I think that's 6 exceptional. 7 8 Thank you. MR. GALE: 9 MR. BRADLEY: The GPAC and the LPAC spent significant time discussing those final 10 11 rules thinking about the Valve Rule and, you 12 know, we spent time on gathering. I really like 13 hearing that it's moving down the corridor. 14 My terms, not your terms, but I sort of view it as a corridor, you know, a 15 16 progression. 17 Will GPAC and LPAC see any -- do you 18 think we'll see any deviations from our final 19 votes when we see the final rules? 20 MR. GALE: Well, you know, as you're 21 aware, you know, Ron, you know, that's a great

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question, you know.

The Advisory Committee is an advisory committee to the Administrator and the Secretary, and that final say in that rulemaking -- and this is true any time, right -- is with the Administrator and the Secretary themselves.

But that being said, the recommendations from that advisory committee -- our Advisory Committee, every time they have a very significant sway in how we move forward with that activity, you know.

I was one that had to grow -- the whole process had to grow on me a little bit. I came from the HAZMAT world where we didn't have it, but I really came to really appreciate what the Advisory Committee process brings to the table.

That being said, you know, any rulemaking action that we have, you know, I can't get into specifics of a final rule, but I can tell you that it's -- I would say it's -- they are consistent with what's in the Advisory Committee recommendations and with what is in our

1	direction from our current Administration.
2	MR. BRADLEY: Thank you, John.
3	MR. GALE: Yeah.
4	CHAIR BURMAN: Thank you for sharing
5	that. Thanks for the question, Ronald. Andy
6	Drake?
7	MR. DRAKE: Thank you, Chairman
8	Burman. This is Andy Drake with Enbridge, on the
9	GPAC group.
10	I really appreciate the review that
11	you gave, John. It's a big agenda. We can
12	really see the volume of rulemakings that you're
13	dealing with and certainly the timeframes that it
14	takes to evolve them.
15	I think you've got a lot of important
16	issues there. We've deliberated over many of
17	them.
18	I look forward to seeing those come to
19	fruition where we get to see them as final
20	rulemakings.
21	I think there's a lot of opportunity
22	there to really raise the safety standard of care

and I think there's some really good
opportunities to lower the greenhouse gas
emissions. I think this is an important issue
for all of us and it's important for society.

I think the one thing that really caught my attention in your regulatory priorities was the class location rulemaking.

I think that going after greenhouse gas reduction strategy without addressing class does not make sense to me as it's probably a means of one of the largest sources of gas emissions in our sector.

And I really think that, you know, we're looking at a rulemaking where I think PHMSA provided a response back to Congress -- a report to Congress over five years ago. I think it was back in 2016 is when PHMSA reported to Congress on this.

We have a mandate from Congress inside the PIPES Act to try to make a decision on this by the end of the year.

We had our comments session closed

about a year ago. I think we got good consensus in the review.

This is a good opportunity to advance the standard of care on safety and it's a significant opportunity to lower greenhouse emissions, and I don't understand how this has gotten kind of shuffled down the priority list.

I think this is really something we've gotten good consensus and agreement on and it's just a good opportunity for us. It just seems curious why that has gotten shuffled behind.

And I'm not advocating to slow down on 113 and 114. I think those are important discussions. We're going to get a robust discussion this afternoon. I really just didn't understand how that got placed so far down the agenda.

I think it's just a great opportunity for us and I just wanted to kind of get your thoughts on that.

MR. GALE: Well, I mean, I think, to me, it's my resource allocation management, you

know.

You know, it's one thing to deal with any kind of re-authorization bill and that usually requires a lot of work on my office. A lot of things are in these bills related to rulemakings.

Couple that with an administration change, you know, going through the actions that had to occur at the end of 2020 and then basically, you know, then meeting with/briefing the new leadership that came on board in 2021.

It takes a wee bit of time.

And so, putting our resources at the areas that are most important to the Administration takes some time, takes some effort.

Luckily, I -- we have some really good people and, in my opinion, it's pretty much a miracle that we're able to move as quickly as we can, but I know, you know, when we did discuss class location rule, we discuss it in the context of both public safety and also the greenhouse gas

emissions potential of the rule. 1 2 I can tell you that for a fact, Andy, that that is part of the discussion when we have 3 4 it. 5 And, you know, I can commit to you 6 that, you know, we will move on this as our 7 resources permit as we balance all those 8 different priorities that are in front of us, but 9 it is on our list and hopefully we can move on it sooner than later. 10 11 But I'm very optimistic by, you know, early to mid-next year that we'll be meeting with 12 13 you guys and bringing that proposal in front of 14 the Committee. Okay. 15 CHAIR BURMAN: Thank you. 16 Andy, do you have any further follow-up before we 17 go to the next commenter? 18 MR. DRAKE: Just a quick comment, 19 Chairman Burman. I think I'm going to use an old 20 adage, I think, juice and squeeze. 21 This is an opportunity -- this is largely, if all, largely done and we've got a 22

1 chance to really create a lot of value with a 2 little bit of energy. So, as you look at the prioritization 3 4 of your resources, and I know you -- I appreciate 5 what you're saying, John. MR. GALE: Yeah. 6 7 MR. DRAKE: You've got a lot of things 8 on your plate, you've got a limited number of 9 resources, but I think this is an opportunity to create a significant and valued improvement with 10 11 very little effort given how much energy has gone 12 into this over five or six years. 13 It's largely done and I just wanted to 14 put that thought out there. 15 MR. GALE: Very good. 16 MR. DRAKE: Thank you. 17 MR. GALE: And I'll let you know, too, 18 one of the thoughts we have, too, is we 19 understand that, you know, if we can move forward 20 with this activity, this can potentially free up 21 resources for us from our special permit side of

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the house.

1	So, you know, we understand that and
2	we've had conversation with our Administrator
3	Brown and conversations with Alan, and we are
4	committed to moving as fast as we can on this.
5	CHAIR BURMAN: Okay. Thank you, John.
6	Andy, if you can put down your hand, next we have
7	Peter Chace and then we have Chad after that.
8	Peter?
9	MR. CHACE: Hi, John.
10	MR. GALE: Hi, Pete.
11	MR. CHACE: Quick question. Earlier
12	in your presentation you had a link to a URL
13	where you summarized, you know, some of this
14	information.
15	Would you mind giving that out again
16	or going back to your early slides?
17	MR. GALE: Sure. Was that the PIPES
18	Act chart URL, Pete?
19	MR. CHACE: Yes.
20	MR. GALE: Would it work if I just put
21	it in I hate to say this word, I'm too old to
22	say this, but put it in chat?

Yes. That sounds great. 1 MR. CHACE: 2 Thank you. I'll do that. 3 MR. GALE: Okay. 4 Chad, do you have a question, sir? 5 MR. ZAMARIN: Yeah. Chad Zamarin, Gas Pipeline Advisory Committee and with the Williams 6 7 Company. Thank you. 8 And not to rehash anything that Andy 9 said, but I did want to just reinforce maybe a thought, John, that, you know, over the last 18 10 11 to 24 months midstream pipeline companies have 12 been rolling out our path to net zero. 13 You know, the community has actually 14 committed to a climate aspiration of achieving net zero and I can tell you that from Williams' 15 16 perspective we've also set a 2030 goal. 17 And the primary -- which is getting to 18 56 percent reduction of greenhouse gas emissions 19 by 2030 on that trajectory towards zero by 2050. I will tell you that most of the 20 21 reductions in greenhouse gas emissions that we're

going to accomplish over the next ten years are

directly related to changes to how we operate and maintain our existing infrastructure.

And so, it is probably a good time for both PHMSA and industry to make sure that we're synchronizing our strategies because, you know, there are many things that we think we can do to achieve significant greenhouse gas emissions.

Andy mentioned class location changes, you know. EMAT tools are another important advancement, but there are a list of things we've started identifying that says, look, if we can do these things, we can impact, here and now, significant emissions reductions.

I just wonder if -- this is kind of a new lens that we're all putting to our goals where we were pretty focused just on that safety element, but now we've really added a big emphasis on emissions reduction.

So, not a specific question, but more so maybe there's -- is there an opportunity for us to collaborate a bit or at least allow PHMSA to see some of the key areas where we think we

can drive emissions reductions and we can both align on, you know, kind of win-win opportunities that -- and demonstrate that from a regulatory change perspective the impact could be, you know, this big for these particular areas.

And that may help inform, you know, the things that we try to do.

Thank you, Chad. MR. GALE: Sure. I mean, I know -- and I can talk to Alan and Tristan about this, you know, ways we can find those areas for that collaboration, but I know when the team started looking at this -- and, again, I can't emphasize enough the data that we got from EPA and the amount of work that had already occurred in this area because it identified for us very quickly the differences in the methane emissions, so to speak, you know, from gas transmission, for example, to gas distribution, to gas production, to gas gathering, right, and understanding what those differences are and how to impact that methane footprint, you know.

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If you look in the gas transmission world, leaks necessarily -- there's some there, you know. Outside the compression stations you're not seeing it, you know, that much, but you may see it in the area of things like venting or, you know, pipe change-out, for example, right?

And what can we do to really impact that methane footprint gas transmission? Where is the emissions coming from?

Are they coming from compression stations? Are they coming from maintenance and repairs? Are they coming from pipe change-outs?

And then focus -- what we've been trying to do is focus our regulations and focus our proposals in those areas, and we did the same in gas distribution.

In other words, we're not just kind of a blanket one-size-fits-all. Where are the leaks coming from? Where are the emissions coming from? And we're trying to focus our proposals in those areas.

Thank you. And before 1 CHAIR BURMAN: 2 -- I think, Alan, you had your hand raised. Mayberry from PHMSA. 3 4 MR. MAYBERRY: Yeah. Thanks, Madam 5 What a good discussion. I look forward to our discussion on Section 114 as well. 6 Section 114 of the PIPES Act is 7 8 actually a very comprehensive mandate that deals 9 with operational releases and a lot of moving parts on it from, you know, operators updating on 10 11 in plants, to ultimately a report and possible 12 rulemaking at a later time related to this area. 13 So, look forward to that. So, stay tuned on 14 that. Chad, did you 15 CHAIR BURMAN: Great. 16 have any follow-up on what you heard? 17 MR. ZAMARIN: Nope. Thank you. 18 CHAIR BURMAN: Okay. Great. I don't see any other hands from the presenter. Alan, if 19 20 you can put down your hand, that would be great. 21 Any other committee members on GPAC or 22 LPAC before we go. Ron Bradley?

1 MR. BRADLEY: Thanks, Madam Chair. 2 John, you know, this is interesting --CHAIR BURMAN: And, Ron, if you could 3 4 just again say who you are. 5 Okay. Thank you. MR. BRADLEY: Ron Bradley from PECO. Also, the Gas PAC. 6 Thank you for that reminder. 7 8 (Audio interference.) 9 MR. BRADLEY: Ron Bradley from PECO, So, I just love this conversation. 10 Gas PAC. 11 think Chad's had some really great comments and I 12 agree with them. Especially the comment about the lens that we're all looking through. 13 14 It will align with where we need to go with this nation to reduce emissions. 15 16 that's exceptional. If we don't talk about it at one fell 17 18 swoop (audio interference) do you see -- John, do 19 you see an impact in -- I do. I see an impact in 20 damage prevention and reduction in damages 21 because then you have --22 (Simultaneous speaking.)

1 MR. BRADLEY: And I Like your term 2 "strategy" about reducing methane emissions. Ι think part of our program will always be to drive 3 4 underground damages down. 5 We want the public not only to 6 excavate safely, but, you know, that's also shifting the lens up. Every time you hit and 7 8 disrupt a piece of pipe, it creates emissions. 9 So, do you see targets --10 MR. GALE: For sure. I mean, when we 11 -- yeah, I'm sorry, Ron. Yeah, exactly. I mean, 12 when I refer to the strategy, yeah, damage 13 prevention is part of it. 14 Pipe replacement, you know, a large segment, as you're probably well aware, of 15 methane or natural gas releases are from old 16 17 infrastructure like cast iron pipe. 18 We've met with, you know, a lot of 19 different folks to try to get better educated in this. 20 21 And one thing that was -- came out crystal clear from the gas distribution world was 22

1 replacement of cast iron pipe has a dramatic 2 impact on the amount of methane that's reduced. So, cast iron pipe replacement, damage 3 4 prevention, methane detectors in homes, you know. 5 So, a variety of things. Even rate setting, how rate setting 6 7 impacts how operators look at loss and 8 unaccounted-for gas. 9 So, our team -- and when we met with our leadership, we described to them what we want 10 11 to do in terms of the pipeline safety 12 regulations. We also have identified areas that we 13 14 think, as an administration, they should look at 15 that are outside the regulatory code and damage 16 prevention is part of that. 17 Ms. Burman, I believe Andy may have 18 another question. I'm not sure. 19 Okay. I don't see any CHAIR BURMAN: 20 hands raised. Andy, did you have another I don't see his hand raised. 21 question? 22 MR. GALE: Okay.

1 MR. DRAKE: No question. 2 CHAIR BURMAN: And now I see Jon 3 Airey. 4 MR. AIREY: I just wanted to let you 5 know I joined. That was all. CHAIR BURMAN: Excellent. Wonderful, 6 7 Jon. Thank you. 8 MR. AIREY: Yep. 9 CHAIR BURMAN: Okay. Great. If you 10 could put your hand down, Jon, that would be 11 So, I don't see any other questions from 12 GPAC or LPAC members. 13 Are there any attendees who want to 14 make some brief comments? I don't see any hands 15 raised on that. 16 I think these comments largely -- or 17 questions largely fell into what I consider 18 ensuring that there's a continuing and enhancing 19 engagement in the collaborative nature, what are 20 the priorities and some support for maybe looking 21 at changing some of the priorities or the order

of the priorities, making sure you have the

resources, and also the fundamental question of the role of GPAC and LPAC in these substantive issues and the advisory review process to make sure that, at the end, whatever is done by PHMSA and the Administrator understanding that they have ultimately decision-making authority, what will that look like and will it be complementary to the work that everyone is doing on these critical issues and ensuring that we're working together in that fashion.

With that -- and then it sounds like,

John, there's going to be some discussion

internally at PHMSA in terms of listening to some

of these comments and perhaps figuring out

resource allocation as well in some of these

critical areas. And we'll get under the hood in

other agenda items more specifically on that.

Do you have any other comments, John, before we go to the next --

MR. GALE: I think we're ready to move on to Ms. White.

CHAIR BURMAN: Okay. Great. Now,

we're on Agenda Item 4. This is research and 1 2 development. Ms. White. MS. WHITE: Hi. Good afternoon. 3 4 CHAIR BURMAN: And if you could just 5 speak up, that would be great. Let me go ahead and 6 MS. WHITE: Sure. 7 try to present my screen. Okay. Can everyone 8 see my slides? 9 CHAIR BURMAN: Yep. Now, I can. 10 MS. WHITE: Okay. Great. And good 11 afternoon, everybody. My name is Sentho White. 12 I'm the director of Engineering and Research within PHMSA's Office of Pipeline Safety, and I'd 13 14 like to thank you all for this opportunity to 15 provide the committees with this update on our 16 pipeline safety R&D activities for 2021. 17 The DOT has defined and prioritized 18 these five pillars shown here to support the 19 DOT's strategic goals. The first is to make our 20 21 transportation system safer, to grow the economy, 22 to address inequities and meet the needs of

underserved communities, to mitigate, adapt to and reverse the effects of climate change, and to prepare for the future transportation system.

activities support DOT's strategic goals through participation in various departmental initiatives, which include DOT's Center for Climate Change and also funding research in areas that directly contribute to the Administration's goals in climate and sustainability.

PHMSA's Pipeline Safety Research

Program sponsors R&D projects focused on

providing near-term solutions for the country's

pipeline transportation systems that will include

safety, reduce environmental impact and enhance

reliability.

PHMSA's pipeline safety R&D goals include providing research needed to manage public safety risks associated with the transportation of hazardous materials, providing data to inform pipeline decision-makers in regulatory and outreach initiatives, leveraging

resources to solve multi-modal safety concerns and driving safety innovation and tech transfer.

Our comprehensive research strategy is achieved through multiple inputs. the primary development method is through our R&D forums, which provide significant stakeholder-based input into our future strategy.

We also evaluate the submitted gap ideas where stakeholders can submit a research gap through our webpage portal.

There's also interaction with collaborative partners, such as our sister federal agencies, public advocacy groups and pipeline industry and research organizations that also provide input.

And important initiatives either at PHMSA, the Department or the Administration also drive our research proposals and projects.

All of these ideas are developed into a research agenda that is reviewed by the Pipeline Safety R&D Program and our pipeline leadership for approval and before soliciting and

awarding on any research projects.

So, as you can see in this slide, our R&D program is very comprehensive in its research strategy through four subprograms, CAAP, SBIR, CORE and interagency research.

And we utilize public-private

partnerships with stakeholders, academic

institutions, small businesses and federal

agencies such as NIST, FRA and a few of the DOE

labs to implement research projects.

The program is executed through competitive awards, cost-sharing agreements and also interagency agreements.

And the four subprograms address different research requirements and are designed to develop and advance R&D concepts from their initial stages to industry or government adoption.

PHMSA's Safety Pipeline Safety R&D
Program is focused on the following project
topics as shown here with the intended research
outcomes described.

As an example, in 2022 we expect to fund research projects providing knowledge and support of managing risk and removing barriers for transportation of hydrogen and other renewables by pipelines, as mentioned by our Administrator Brown.

We anticipate that these project outcomes will advance the safety of pipeline infrastructure and support climate change solutions.

So, since 2002 when the program was established, PHMSA has made almost \$167 million in research awards to 380 projects.

And since 2013 when CAAP was launched, awards have been made to 25 universities and involve over 344 students in pipeline research.

The program continues to show successful performance in advancing innovative pipeline safety technologies through tech demonstrations, patents and commercialized technologies.

And since 2002, there have been 33

commercialized technologies and 16 patents
granted as a result of PHMSA-sponsored projects,
and PHMSA's tech transfer rate is 33 percent
based on CORE and SBIR Phase 2 projects.

In addition to tracking performance metrics on our tech projects, we also track performance -- program performance such as the number of R&D website hits, which are over 41 million to date, and research project downloads of over 2 million since 2008.

Also tracked are performance metrics on knowledge outputs from PHMSA R&D projects and stakeholder engagements, and over 260 R&D final reports and 237 conference presentations or journal papers have resulted from PHMSA-funded projects since 2002.

And now, to our 2021 R&D awards. So, in 2021, PHMSA awarded \$12.6 million on 19 R&D projects across our CORE program, CAAP, SBIR and IAA program, and I'll go into more detail on the next few slides.

There were three new projects awarded

in the area of pipeline threat prevention. The first project awarded to GTI will develop a method to estimate the accumulated strain of a steel pipeline experiencing ground movement and assess the strain demand and capacity of the system.

The second project, also awarded to GTI, will provide recommendations and guidance to the natural gas industry on regulator designs where there is a sufficiently small installation footprint and where limited outside space exists.

This project addresses the NTSB's recommendations to improve natural gas regulator design installations as a result of the unfortunate 2016 building explosion and fire that occurred in Silver Spring, Maryland.

And the third project was awarded to
North Dakota State and will assess the likelihood
and severity of corrosion/erosion damage threats
and recommend effective, preventative and
mitigative measures.

These measures will provide a tool for

operators to better predict and prevent future failures resulting from these internal pipeline threats.

PHMSA continues to build its LNG research portfolio in order to address various regulatory and industry challenges related to LNG hazards and advance alternative designs for LNG storage and piping systems.

In this first project, Blue engineering will evaluate the operation of LNG tanks without bottom-fill capabilities and determine the process means that will allow this operation to be performed safely.

The output will provide new knowledge on the integrity challenges and guidelines for the safe operation of these tanks.

The second project was awarded to Simpson Gumpertz & Heger and will evaluate external steel shell tanks that is subjected to external and internal accidental loads and resistance from blast loads, fire, radiation and flame impingement.

It will also evaluate projectiles not yet studied in detail to full containment LNG tank applications.

Material impacts from instantaneous exposure to large temperature differentials remains a challenge.

This first project awarded to Purdue will determine the maximum permissible temperature drops for steel when exposed to cryogenic liquid through finite element analysis.

It will also accomplish this by leveraging available artificial intelligence tools to analyze LNG tank and pipe-in-pipe systems.

The second project was awarded to PEMY

Consulting and will outline current best

practices for inspection and testing to ensure

the integrity of above-ground cryogenic storage

tanks.

It will also develop recommendations on inspection strategies for these tanks, which may also identify requirements for new technology

solutions.

PHMSA's underground natural gas
storage research portfolio continues to develop
solutions that support integrity management
programs associated with the more than 17,000 gas
storage facilities in the U.S.

This project was awarded to PRCI to review and test the technology used to inspect through-tubing and casings of underground gas storage wells, and will also develop a reliability-based assessment framework to better inform decision-making about casing corrosion management.

PHMSA awarded these two materials projects to GTI and Edison Welding Institute to evaluate the safety, materials and design requirements for alternative steel and compositetype materials used in gas transmission and gathering pipelines regulated under 192.

PHMSA's CAAP program will continue to partner with universities and, in 2021, awarded projects addressing the integrity impacts of

hydrogen service and expanded its research portfolio in artificial intelligence and machine learning.

Our 2021 funding opportunity allowed for projects with greater scope and complexity by increasing our funding.

Previously, our CAAP projects were capped at 250,000, but, in 2021, projects applied for up to \$1 million in funding amounts and we funded three projects totaling approximately \$1.9 million, as listed here.

The first project funded through CAAP was awarded to Arizona State University. ASU will be working to develop an artificial intelligence-enabled framework to aid existing pipeline operators with their pipeline integrity management programs as they shift towards the use of emerging fuels such as hydrogen.

The second project was awarded to
Rutgers University. Rutgers will be developing
an AI-enabled model which will aid operators in
their inspection and repair action decision-

making process.

And the third project was awarded to Colorado School of Mines. CSM will investigate the feasibility of using distributed acoustic sensing cables to detect and locate pipeline integrity issues using different deployment methods.

And specifically, CSM will be investigating the use of internally deployed cables to minimize the cost of pipeline excavation for cable replacement.

In 2021, PHMSA's SBIR program funded four Phase II projects in the areas of anomaly detection and threat prevention.

In the first project with QuakeWrap, they are developing a system capable of in situ repair of various defects with a composite material.

The second project --

CHAIR BURMAN: Hold on a for a minute.

Is the court reporter on? I'm wondering if he might have just had a technical issue.

1	Can we just hold for a minute, Ms.
2	White?
3	MS. WHITE: Yes.
4	CHAIR BURMAN: Thank you.
5	(Pause.)
6	CHAIR BURMAN: Is it okay now for us
7	to continue?
8	THE COURT REPORTER: Yes, ma'am. I'm
9	very sorry about that.
10	CHAIR BURMAN: That's okay. Thank you
11	so much. Thank you. We're ready to continue.
12	MS. WHITE: Alright. Thank you, Madam
13	Chair. So, we're on our second project for SBIR.
14	The second project is with Creare and it's going
15	to be demonstrating novel sensors capable of
16	identifying bending stresses, something currently
17	not achievable with existing ILI technology.
18	And the third project with JENTEK is
19	also testing novel sensors for measuring bending
20	stresses and improve crack detection.
21	And the fourth, and final, project for
22	SBIR is with Paulsson, which will be monitoring

geohazards to improve through durable, longlasting, tightly coupled fiber optic cables that accurately measure strain, temperature, and acoustics on pipelines.

And, in 2021, PHMSA funded two interagency agreements with the Department of Energy and National Labs. The two projects will utilize specialized government knowledge and technology to address specific gaps in pipeline safety.

And PHMSA funded these two projects listed here accounting for about \$1 million in federal funds.

The first project was funded through the National Energy Technology Laboratory, NETL, and focused on the detection of unlocatable buried plastic pipelines.

NETL is going to be investigating the utilization of emerging government technologies to detect buried pipes.

And the second project was funded through Sandia National Labs to determine the

impact of geomagnetic disturbance events on pipelines. The project is being co-funded with DOE to determine the impacts of electromagnetic pulse attacks.

These next two slides highlight success stories in tech and knowledge transfer.

And, in 2013, PHMSA awarded Northeast Gas

Association with a research project to develop a sensor for use on inspections of unpiggable gas pipelines.

And upon completion of this project,

Northeast Gas registered tech transfer in

February of 2021 to Pipetel's Explorer line of
robotic inspection tools.

And this next project was a notable knowledge transfer milestone. And this work, also with Northeast Gas, validated the use of technologies that measure methane leak plates from distribution systems within actual communities.

And this project identified common shortfalls of quantifying methane emissions in

the field and standardized the test protocol by developing a validation process framework.

This knowledge breakthrough could result in pipeline decision-makers developing a national standard that, when published, could lead to providing PHMSA with a technical basis for potential future regulatory actions.

And these next two slides identify the anticipated 2022 Pipeline Safety Research program priority areas.

And on one priority area, as discussed previously, is in the area of pipeline leak detection.

And PHMSA plans to solicit research projects that address those safety gaps that were identified during the May 2021 Leak Detection Public Meeting, as well as fund research in areas that will advance technologies on methane identification and detection.

And, you know, as mentioned, this initiative is also a larger part to address the congressional mandates in Sections 113 and 114 of

the PIPES Act of 2020.

And research under this program are will strongly support the Administration's climate initiatives and our efforts to abate methane releases from pipeline infrastructure.

Another priority area highlighted is in pipeline threat prevention. Research investments will develop new or improved tools and technology to aid in the prevention and reduction of damage to pipelines thereby enhancing safety and preventing or eliminating methane releases into the environment.

The specific research conducted in each of these areas will be determined by stakeholder input in collaboration at PHMSA's R&D forum this November.

And these next two slides will provide a status update on PHMSA's R&D initiatives at FRA's transportation technology center in Pueblo, Colorado.

In 2020, PHMSA initiated two shortterm R&D projects at TTC. We awarded the first project to the Transportation Technology Center,
Inc., or TTCI, to evaluate fatigue on pipe
transported by rail.

The objective of the project was to show, through full-scale testing and analysis, the impact of rail transportation on fatigue damage to pipe.

TTCI developed a test plan and pipeline samples were also procured for testing. The project is currently on hold pending the execution of a new contract vehicle at the TTC facility.

And the second project objective was to build upon prior research in the area of case crossings and railroad loading, evaluate best practices and other guidance in use today.

And TTCI completed the development of this test plan and we intend to fund the testing described in the research plan contingent on funding availability following the execution of a new contract vehicle at TTC.

And I'll now hand it over to Mr.

Mayberry to discuss the status of the proposed RDT facility.

MR. MAYBERRY: Thanks, Sentho. As you may recall, the past couple years we've been working to develop an approach to using this existing Federal Railroad Administration facility in Pueblo, Colorado.

This slide here, this shows you one of the visual schematics that was generated through that effort and we certainly appreciate the work of the focus group that has been assembled under or prime contract related to that.

You may recall in the many provisions of the recent PIPES Act, there are a number of to-dos related to the work we were -- or at least the development of a facility out there.

First, related to Section 105, there is a requirement to perform a study to look at the need for a pipeline safety testing facility, which is -- the study is currently underway. And so, that will determine, you know, next steps.

And we'll see how it fits into the

overall parties of the Administration on just where that has -- but we first must submit that study to Congress and receive approval before we go further.

So, currently the project is on hold and, you know, pending, you know, preparation of that report and then for their approvals and then, of course, you know, depending on how it fits in with our overall research priorities.

The other -- there was a requirement to submit an updated research plan. Many of the provisions of that plan are -- were discussed by Sentho today and that is also a plan that's submitted actually under our 2021 appropriations.

So, to move on, I think that is --

MS. WHITE: Alright. Thank you.

MR. MAYBERRY: Yeah.

MS. WHITE: Thanks. So, what are PHMSA's future R&D plans? So, we plan -- our plan includes continue to work on safeguarding the environment by investing further in leak detection R&D and investing in new projects

addressing the safe transportation of emerging fuels, such as hydrogen, by pipeline.

Additionally, we plan to continue our outreach with minority-serving institutions, or MSIs, throughout our CAAP program.

PHMSA will look to strengthen MSI participation by conducting visits to various universities on research opportunities and the benefits of the CAAP program for the university and students.

And as Administrator Brown mentioned, we are also planning to host a virtual hydrogen and emerging fuels R&D forum on November 30th through December 2nd where the first day will be a public meeting and general discussion followed by the second day that will consist of smaller -- six interactive working groups where participants will take a deep dive in a particular R&D topic and develop research topics to address those gaps.

And we've currently established a steering committee who's going to help in

developing the agenda for these working groups. 1 2 And then we'll conclude on the third day with a report out from each of the working 3 4 groups. 5 And I'll wrap up by providing a few important links to find out more about our 6 program, including links to all of our projects 7 8 and how you can submit a research gap idea. 9 And, of course, all of this great R&D work in our program could not be achieved without 10 11 our R&D team, Kandi Barakat, Robert Smith and 12 Nathan Schoenkin. 13 And so, on behalf of our R&D team, 14 Madam Chair, I want to thank you and the 15 Committee for your time and can take any 16 questions that anyone may have. 17 CHAIR BURMAN: Thank you. This is 18 really, really helpful. I'm going to turn it 19 over -- I think there's a question or a comment 20 from Shawn. 21 Shawn, remember to state your name, 22 organization and which committee you sit on.

Thank you.

MR. LYON: Thank you, Chairman. This is Shawn Lyon with Marathon Pipeline, part of LPAC.

And, Sentho, thanks for the update and it's always -- I remember the last time we were in person in 2019 in D.C., you gave a similar update and it's always impressive to see all the different things we're working on.

I know on the industry side we spent a lot of time collaborating, I'll say, on safety issues, environmental issues and how we can work together, and we've seen benefit to that through that collaboration.

Really, there's two questions I've got or comments. How do we do that with PHMSA so we can try to pool our resources, our technical expertise, our finances to help even advance that together based on some things you laid out there.

And I don't know if there's a separate forum outside of LPAC/GPAC to do that, because I think there's a lot of things we're talking about

that may align or be even more beneficial that we know from operating the pipes there.

And along those lines, I think one of the things that hit me as I saw a lot of the grants that were granted -- that were given out by PHMSA was is there operators working with those folks who, you know, applied or you're giving money to.

I'm a firm believer -- I think

technology is only as good as it can be applied

in the real world. It's great when it happens in

the laboratory, but execution -- and I've seen it

many times before where it worked at one time,

but the application just isn't feasible with

that.

So, anyway, I'll stop there and see if you have any comments on that and then I just have one other question about the PIPES Act.

MS. WHITE: Sure. So, in regards to your first question about collaboration, I would say that one of the best ways to do that is through our R&D forum and we're actually going to

1 be going live with publishing the Federal 2 Register Notice for that this afternoon. And so, we also have a public webpage 3 4 that I'll direct you to the Federal Register 5 Notice, but there you will be able to sign up for the six working groups and, really, that's where 6 we receive a lot of input and collaboration. 7 8 Again, like I mentioned on the second 9 day, that's where there will be a lot of interactive discussions with our stakeholders 10 11 that can really help to inform, you know, the 12 next steps for our R&D strategy. 13 And with respect to your second 14 question related to -- can you repeat the second 15 question again? I apologize. Yeah, sure. No problem. 16 MR. LYON: 17 On the grants you've given out --18 MS. WHITE: Oh, yes. 19 MR. LYON: -- how are operators, you 20 know, engaged in that to make sure we get the best chance for it to be successful in the real 21 world? 22

MS. WHITE: So, the second -- your second question, many of, actually, our R&D projects are funded through CORE. That's actually our primary mode and there are a lot of technology projects through that.

We've seen a lot of partnerships between industry, between tech providers, and operators sometimes through tech demonstrations. So, that's a very good vehicle to partner up.

Also with CAAP, too, we really encourage at the academic level, and we tried to put this in our CAAP solicitations, to really have industry partner also with universities, because that's another great way to have that collaboration.

MR. LYON: Okay.

CHAIR BURMAN: So, Shawn, before you ask the next question, I did just want to see if Alan Mayberry had any comments because I see his hand is raised.

MR. MAYBERRY: Well, I just wanted to say, first of all, Sentho, thanks for an

excellent overview.

Shawn, great questions. One of the reasons we're bringing the R&D program before you today is to, you know, seek guidance from the Committee. If you have any input, we're all ears.

And that, you know, can be done, you know, in the course of our discussions right here during the Q&A, but also in the meeting docket, but, you know, we always value the opinion of this committee -- or these two committees.

And so, any input you might have -- I will say, you know, talking with you and others over the years, I know one of the challenges with research is just the time it takes.

And so, many of you, you know, go directly to technology providers to work a solution for a specific issue and actually I'd love to work closely with you, PRCI and other stakeholders, EDF and others, in finding ways to speed up the development of technology, mainly. Thank you.

1 Thank you. And before, CHAIR BURMAN: 2 Shawn, you ask your next follow-up question to that, I do just want to recognize that then the 3 4 order of speaking will be Andy Drake, Ron Bradley 5 and then Sara Gosman. I don't see any other hands up, but 6 7 feel free, if you want, to raise your hand and we 8 will get you after the other three. 9 Shawn, if you want to ask your follow-10 up? 11 MR. LYON: Yeah, just a quick -- so, 12 in the PIPES Act, I think it's Section 104, it 13 was a pilot technology program that was laid out 14 there and just was curious if PHMSA had any guidance for the industry, how to participate in 15 16 that. 17 Again, we're doing a lot of stuff on the technology front that is really, honestly, 18 19 kind of exciting and really game changers in how 20 we can participate that through the PIPES Safety 21 Act.

Sure.

Great question.

MS. WHITE:

So, we are in the process of -- and we just received approval to start drafting a Federal Register Notice that will provide guidance on the provisions where applicants can submit an application for a pipeline testing enhancement project.

And there are various provisions in the mandate and I can go through a couple of those, but a part of it is the application will require an environmental assessment.

The project cannot be located in HCAs.

There has to be -- the operator must show an SMS

program, and also the project needs to show some

-- sort of the R&D that's been done either

partnering with PHMSA and other -- a research

entity.

So, those are just a few and I think
I've probably left some additional departments
out, but that's some of the provisions.

MR. LYON: Yeah. Thank you. That's helpful. And, Alan, just to carry off your comments, I think it would be good for us to

continue that discussion because you hit it. 1 2 I think we're looking to how do we move the technology faster for real-world 3 application and make a difference with the monies 4 5 that you're, you know, you're focused on and then the ones we are, too. So, that would be a good 6 7 thing. 8 Yes, definitely. MR. MAYBERRY: And, 9 as you know, the focus of our programs is short and midterm, you know, solutions. 10 11 We're interested in the ability to 12 apply the work, the monies we spend, you know, to 13 the pipeline safety matters, so, you know, as 14 quickly as possible, but thanks. 15 MR. LYON: Thanks. 16 CHAIR BURMAN: Okay. Great. Thank 17 you so much. And next we're going to have Andy 18 Drake, but before, Andy, you speak, I just do 19 want to remind folks that we're going to be 20 taking lunch after Agenda Item 5. 21 We're currently on Agenda Item 4.

Agenda Item 5 is the cybersecurity one and then

we'll take a virtual 45-minute break after that 1 2 period. Andy? 3 4 MR. DRAKE: Thank you, Commissioner 5 This is Andy Drake with Enbridge with the GPAC Committee. 6 7 Sentho, I appreciate the update. 8 That's a great review. Very substantive. Ι 9 appreciate the challenges that you're facing 10 there. 11 You're dealing with some real issues 12 in the industry and I think pushing the envelope 13 there is really critical for us to improve the 14 standard of care. I think the question I have is not 15 16 really a question, it's really just a comment, is 17 -- maybe to Alan's point, is really about 18 collaboration. 19 We're doing a lot of things in the 20 same areas, as you know. I mean, INGAA is 21 working on integrity management, continuous

improvement opportunities to advance the state of

care and lower greenhouse gas emissions.

I mean, I think the key here is how do
we do these things in parallel and keep in sync
with each other to keep propelling and
iteratively developing those platforms.

I don't know that it may be a different venue than some of the research committees that you're talking about sitting on, but it may be just more of a sharing, staying in sync as kind of state of the state.

I just offer that because when you're going through that, so many of the themes that you're working on are very congruent with things we're doing, you know, working on hydrogen transport, working on alternate materials.

As you know, we're working on a geohazard standard to try to define best practices and advance how to apply technologies consistently. I think that's a big void there.

Also, crack protection.

I think those three in particular -four in particular would be good opportunities

for us to have maybe some close interval 1 2 exchanges on because it's moving that fast, which is a great opportunity, but we don't want to end 3 up going two different directions on something. 4 I think we can iteratively develop 5 this and move the needle quite synergistically, 6 but I just offer that. 7 I know we've talked a little bit about 8 9 some of those things, but I do think it would be helpful. Maybe we can take that offline as a 10 different -- how do we stay in sync. 11 12 And maybe that's a little bit of where 13 I kind of heard Shawn going to. How do we stay 14 in sync with one another as we're working on these parallel paths that are on the same issues. 15 16 Anyway, I just thought I'd put that 17 out there. So, I think it's great work. We're 18 all pointed, sort of, in the same direction. 19 I hear those common themes and I think 20 it's just how can we work to keep supporting, 21 synchronizing and reinforcing one another.

Thank you for your efforts.

1	work.
2	MS. WHITE: Thank you, Andy.
3	Appreciate that. And I will say that and we
4	have talked with pipeline leadership about this,
5	but even having our forums are every other
6	year, but, you know, we would like to have a
7	closer type of open public meetings to discuss
8	some of the more specific topics like you
9	discussed.
10	So, we definitely have heard that and
11	have proposed that to our leadership.
12	CHAIR BURMAN: Great. Thank you.
13	MR. DRAKE: Thank you. I think that's
14	great.
15	CHAIR BURMAN: Okay. So, next up is
16	Ron Bradley and then Sara Gosman and I see no
17	other hands.
18	MR. BRADLEY: Thank you, Chairman
19	Burman. Ron Bradley from PECO with the Gas PAC.
20	Sentho, good afternoon. Good afternoon.
21	Yeah, I was really impressed by the

report. I wanted you to know that. I think it

was really well done.

Research and development is going to be really critical to continue, you know, to uncover new technologies. To sort of go down that -- the path of even growing those new technologies out I think it's really -- it's really vital to what we do.

I definitely appreciate your continuing to partner with not only industry, but research and the public.

There's one other thing that I was really impressed by and it's -- I think it's the Department of Transportation's strategic core values.

The fact that you guys call out per aligning with the core value of equity, I think that's really important because especially in this energy corridor where there's lots of different people that can get engaged.

There are lots of folks that aren't engaged right now that could be very capably engaged, and I think the fact that you're

1	considering, you know, ways to get more diverse
2	participation and get more diverse opinions, you
3	get more diverse perspectives and I think we can
4	get a much, you know, a much more better product
5	with a diverse approach versus a monolithic
6	approach.
7	So, thank you for expanding and I
8	really appreciate what you've done. No
9	questions, just that comment.
10	MS. WHITE: Thank you. Appreciate it.
11	CHAIR BURMAN: Thank you. I also
12	know, Ron, it seems everybody comes in and out
13	during your speaking.
14	I think next we had Sara Gosman and,
15	Ron, if you could put down your hand, that would
16	be great.
17	MS. GOSMAN: Hello. So, this is Sara
18	Gosman. I'm a member of GPAC and with the
19	Pipeline Safety Trust as well as the University
20	of Arkansas.
21	So, I just want to again thank you for
22	this update. I'm really glad that PHMSA is

funding such important research. 1 2 I'm wondering if PHMSA has funded interdisciplinary research or has considered 3 4 funding it. So, I'm thinking particularly research 5 that involves social science, economics, 6 7 geography, political science, as well as engineering and traditional science fields. 8 9 I think this is particularly important for issues such as climate change and also issues 10 such as environmental justice. 11 12 So, I know the direction from Congress 13 is on pipeline integrity, but I think there are a 14 lot of ways to ensure pipeline integrity and certainly ways that social science could 15 16 contribute. 17 So, I'm more, you know, sort of 18 comments and a question as well. Thank you. 19 MS. WHITE: Sure, Sara. Thank you for 20 So, one of the working groups that your comment. 21 we have established for the forum is in support of Executive Order 13-985, Advancing Racial 22

Equity and Support for Underserved Communities, 1 2 through the federal government. And that working group is going to --3 4 is focused on rehabilitation of aging cast iron pipelines, but we are planning to look at, you 5 know, not only technological solutions, but, you 6 7 know, how to rehabilitate aging cast iron pipelines, but also, you know, where these lines 8 9 are located in socially vulnerable communities. So, there is that aspect of looking at 10 11 that from a socioeconomic perspective, but, yes, 12 we are open to other areas. 13 They have to align, of course, with 14 the pipeline safety because that is our mandate 15 from our Pipeline Safety Improvement Act, but, 16 yes, we'll definitely discuss that with our 17 leadership. 18 And I see Alan has his hand up. 19 CHAIR BURMAN: Alan? 20 MR. MAYBERRY: If I can get my 21 controls -- yes. You know, related to that, Sara, in another initiative we've looked at our 22

incident -- we've had a project working with the
Department in looking at our incident data.

And the project we worked on was a

specifically related incident -- gas distribution incident data and lining it up with -- related to social equity.

We developed an interactive map that showed how the incidents lined up with certain census tracks.

It's really interesting, it's a good start and it's a taste of what's, you know, more to come and expanding it to other areas and also making it public, but it definitely looks at, you know, the impact on underserved communities and communities of color, but we look forward to actually further work in that area, but that's an evolving area I just wanted to make mention of, but it's not directly part of our research program.

CHAIR BURMAN: Sara, do you have any other comments?

MS. GOSMAN: Yeah. Thank you. I just

wanted to follow up then. Thank you, again. You know, I think that work that you're doing on sort of locations of pipelines and environmental justice issues is incredibly important.

And I think it does -- again, I want to make the pitch that I think it absolutely relates to pipeline integrity because communities around pipelines also have an influence on pipeline integrity.

So, I think this is a great opportunity and I want to echo Ron Bradley as well.

I'm glad that you're focusing on issues of diversity, equity and inclusion and I think these are really important issues as it relates to infrastructure generally, and pipelines in specific.

And I also think it's a great opportunity to advance your research and development mission in a way that's more interdisciplinary and holistic. so, thanks again.

MS. WHITE: Thank you, Sara. I will also follow up and say that part of the special permits program is within my division. And so, they're aware the operators submit for a special permit application.

They are also required to submit environmental justice data as well as part of their application and environmental assessment for the -- a request for a waiver. So, we'll practice that as well.

CHAIR BURMAN: Great. Thank you. So,

I don't see any other hands from GPAC or LPAC.

Before we go to the audience, I just want to make

sure that there is no GPAC or LPAC member who

wants to speak.

Seeing none, I will go to the attendees and I see John Stoody. Please say your name, what organization you may be with. Thank you.

MR. STOODY: Hello. John Stoody here with the Association of Oil Pipelines. Thanks, Sentho, for your briefing and thanks for having

this R&D item on the agenda.

I was pleased to hear Tristan reference the potential to use technology to address root causes of pipeline safety and then Alan's comments on speeding up development of technology.

I think I was grateful to hear your comments on -- that PHMSA is working on guidance for the technology pilots.

As you know, that's intended to field test technology. So, get it from the lab to practice, whether that's through regulation or the operator. So, we look forward to that.

One comment I did want to make is you mentioned the opportunity to use the forums as a way for greater interaction with industry and the government.

And I have attended those forums in the past and they are great events, you know.

Good discussions interchanged. The problem is they're very infrequent, you know.

The normal schedule is every couple of

years and then the forum that you have upcoming seems to be more on emerging fuels or, you know, non-liquid pipeline traditional issues.

So, Alan's comment on would be great to find ways to have more frequent discussion of R&D, I think this is a good start.

Certainly you share information with us, but opportunities for that back-and-forth, whether it's on the LPAC/GPAC meetings, you know, industry could share what we're working on.

There could be other topical discussions, so I think we'd really appreciate ways to have that kind of strategic discussion on where do we need to do the R&D, what should we be working on and having it more frequent than, say, every two years or through other mechanisms such as LPAC/GPAC. Thank you.

MS. WHITE: Thank you, John. And I did mention, too, in response to another comment earlier about making sure to have more frequent meetings on more specific research topics.

And so, we definitely hear you and we

are going to be discussing that with our leadership.

Again, we have a fairly small R&D team, but we will, you know, based on that, we definitely will try to make that a priority as well. Thank you.

CHAIR BURMAN: Great. Thank you.

And, John -- okay. So, I see no other hands

raised either in GPAC or LPAC or with the public.

This is a really great discussion. I think it's important to note just how important folks view research and development and technology and the advancement of that.

Some of the things that I heard during this conversation is being more engaged, making sure that we're maximizing the resources as well as the funding opportunities. And also making sure that we work together to try to know what's out there and engage with all the different stakeholders that can be helpful on these issues.

I do see that on pause a little bit as

the R&D facility itself. And the upcoming forum 1 2 is a key one. Again, that's November 30th to December 2nd. 3 It's a virtual forum. It will be 4 5 posted shortly and I would ask that GPAC and LPAC 6 members also, as appropriate, get the -- an email link to it as well. 7 8 Does anyone have any other comments or 9 questions before we go to Agenda Item 5? Agenda Item 5, we will be taking a short 45-10 minute lunch break. Maybe even a little shorter 11 12 if we can do that. 13 Alright. Hearing none, now we'll go 14 to Agenda Item 5, which is our pipeline 15 cybersecurity issues, and I will turn it over to 16 PHMSA staff. Thank you. 17 MR. GAITHER: Thank you, Madam Chair. 18 Good morning or afternoon, based on your 19 location. 20 My name is Time Gaither and I am 21 PHMSA's Director for Preparedness Emergency Support and Security. 22

I have been a part of PHMSA for about 1 2 a little over ten months now and, needless to say, the topic that myself and Scott are going to 3 talk about have definitely taken a lot of our 4 5 interest and focus these past few months. So, with that, I'll turn it over to 6 7 Scott so he can introduce himself. Thank you, Tim. Good 8 MR. GORTON: 9 Tim, can you hear me? morning, everyone. 10 MR. GAITHER: I can hear you, Scott. 11 You're good to go. 12 MR. GORTON: Okay. Thank you. Ι 13 apologize, everyone. I had some technology 14 issues earlier today. I just wanted to make sure 15 you could hear me. 16 Good morning, everyone. My name is Scott Gorton. I am the Executive Director for 17 18 Surface Policy at the Transportation Security 19 Administration. 20 Essentially what that means is I 21 oversee the development of policy for surface modes of transportation, including pipelines and 22

other things like freight railroads and mass transit, developing policy and guidance.

And one of the things we're going to talk about today, the security directives that we recently issued to critical pipelines, that comes under my shop.

We also have a TSA -- another group that was stood up about two years ago, Surface Operations, that's led by Assistant Administrator Sonya Proctor.

I think a lot of people know her from previously. She was my boss and then she stood up Surface Operations to direct our field-facing activities for pipelines, both -- for pipeline security and the other modes of security.

But with that, I will turn it back to you, Tim, so we can move on with the rest of the presentation. Thank you, everyone.

MR. GAITHER: Thank you, sir. I'm going to bring up these slides real quick.

Alright. So, today we're going to talk about a few things.

One of the first things we want to start with is a case study that's something we're all probably very familiar with. We won't go into too much detail about it, but just kind of want to set the tempo for a lot of issues that we're going to kind of jump into today.

We're also going to get some security concerns/issues. We are going to keep that very high level because this is a public meeting.

So, just be aware if you have questions about specifics of that, Scott will be unable to answer some of that information as he sees fit.

We'll be talking about the MOU that TSA and PHMSA went under back in 2018 after the GA audit.

Scott will give a lovely presentation on the security directives, give some information on the PHMSA cyber hygiene discussions, and then we're going to finish it up with some lessons learned and the path forward specifically associated with this cybersecurity and the joy

that we've been dealing with these past few months.

So, on to our case study. Like I said, I really wanted to kind of bring this to light just to touch on some of the topics of this just because it really has changed the face of pipeline and cybersecurity in these past few months since about May when this incident happened.

So, back in May we had a cyberincident that occurred where ransomware was
discovered on a pipeline operator's information
technology system. And, as a precaution, that
operator did take their -- that operational
technology site down.

From a PHMSA perspective, you know, we were worried about safety. Wanted to make sure the pipeline was taken off, you know, safely and brought back up safely.

But because the system was down, it had, you know, a very large impact to the country, especially on the east coast, north and

the south, which we saw a little bit more in the south with fuel supplies.

What's important about this is that, you know, what we saw throughout this whole thing was that, you know, all of us, the federal agencies came together, the private industry came together, and we really worked to kind of figure out what was going on and how we do this.

So, you know, when we talk about information sharing within -- it was done at the highest levels of PHMSA as well as TSA and others.

Scott had mentioned Sonya. Both Sonya and Scott were very much involved in that in the sense of that the White House was meeting daily with Colonial as well as, you know, the PHMSA leadership, DOE leadership.

It was a high-collaborative effort all the way down to some of the daily news that were going on between the trade groups as well as, you know, DOE, TSA and PHMSA.

So, this was something that was worked

at at every level so that we could kind of share information and make sure everybody was aware of what was going on.

so, some of the things that were asked, and it's pretty important and something I want to talk about from the industry side, there's a lot of concerns on the type of attack, the effector of that attack, you know, when it was going to be resolved, what some of these operators could do to prevent this from happening to them.

And on the other side, the fed side, was discovering what happened, you know, who did it. And this is both investigation done by the FBI as well as CISA, you know, what exactly was put on the network and how we could mitigate that and how could we make sure it didn't spread throughout the entire network.

What this really led to at the end of all this is really some of the documents that Scott is going to talk about.

The security directives changed how

pipeline operators have to, you know, handle some of the cybersecurity preparedness and mitigation efforts to support some of the efforts that TSA put out.

And then the other side of it is, you know, a review of current policy. What's, you know, what's currently in place. Is it applicable? Does it need to be updated and, you know, what's the next step?

Some agency perspectives, I can turn that over to Scott real quick.

MR. GORTON: Yes. Thank you, Tim.

And I do want to say the Colonial event was a
tipping point of sorts, but it certainly was not
the sole reason that we issued the security
directives.

And I'll touch on that in just a moment, but it does -- it was a very public realization of the potential effects from cyber incidents that went bad and also the vulnerabilities associated with information technology and operating technology systems.

And the interconnections between those that can have those effects, that it's not just a simple denial of service or defacement that those things can touch the parts of an operating system.

And it's really -- it's pipelines and it's other, you know, sectors, whether it's transportation or other sectors where, you know, the -- because of the connection to the internet, public-facing things and how those are connected to other things, that all of these things point to for critical infrastructure operators to be aware of that and to take measures.

And, you know, there is plenty of guidance out there from CISA, from the Cybersecurity and Infrastructure Security Agency, you know, plenty of guidance out there from industry associations, but I think, you know, this was -- the Colonial event opened a lot of eyes. I mean, I can say it as simply as that. Thank you.

MR. GAITHER: Thank you, Scott. And

from PHMSA, I mean, one of the things that was key for us was when the operator was conducting manual operations.

with is that a lot of operators have not done this continually in practice, so we want to make sure, you know, one of our observations is that we want to make sure that operators are prepared for this, have staff trained to do this and actually exercise it as well.

And then the other side of it is, you know, in our emergency response plans, you know, make sure it addresses all types of, you know, accidents or incidents.

Right now, I think the way it's worded you could defer it means cyber, but we want to be a little bit more specific with that.

So, that's something that, you know, from our -- our point of view, it's something that's very important and leaning forward will be essential to making sure pipeline operators are protected and prepared in case there's any

incident.

Alright. The next area is we're going to talk about some of the ongoing threats. And with that, I'll turn it over to Scott.

As I mentioned earlier, Scott will keep some of these things high level since this is a public meeting. Over to you, Scott.

MR. GORTON: Okay. Thank you, Tim. So, I will go through here and, as Tim mentioned at the very beginning because this is a public meeting, I'm limited in what I can say.

So, what I have here on this slide are

-- is publicly available posted on ODNI's website

and also on the CISA website, but, you know, to

talk about ongoing threats in a very, very broad

sense here for cyber threats, you know, they

really are two groups of potential actors or

attackers depending on our viewpoint, but the

common term is they'll refer to them as "actors."

You know, there are criminal actors who want to extract money from a company, whether it's a pipeline or someone else that they view is

a potential source of revenue.

And, you know, there has certainly been an uptick in the use of ransomware as a means for criminal actors to extract money from legitimate businesses.

Since the, you know, with COVID-19 and a shift to remote working, a lot more online activity, there has been -- the FBI and others have seen an uptick in ransomware.

There are also, you know, there is a host of companies operating on the dark web and in other places where they sell ransomware as a service where somebody with -- who has an interest can actually purchase software and a playbook that they can use against legitimate interests.

So, ransomware and other similar criminal acts that -- are a problem. And, again, because those, you know, that ransomware may depending upon the -- what is the type that's used and how it's deployed, can actually have those effects on the actual operation of the

entity being attacked.

Either shut them off from their customers, they can't do business or if it's, you know, we're talking about industrial control systems and operating technology, could even affect operating technology if it's not properly protected.

The other group of actors that we are concerned with are nation-state actors. And there are, you know, opponents of the United States that, for a variety of reasons, are getting into U.S.-owned assets and looking for information either to gain a competitive business advantage.

It may also be to have a tactical advantage in the event of conflict. There are a number of reasons that nations go after the other nation's data both from the public sector and from the private sector.

And this has been cited, and I have two citations here that talk about China. And this was in the 2019 Office of the Director of

National Intelligence Worldwide Threat Assessment that China has the ability to launch cyberattacks that cause localized temporary disruptive effects on critical infrastructure, such as a disruption of natural gas pipeline, for days or weeks in the United States. And that's a direct quote from that report.

I'm sure there are many in this
meeting today that are aware of this. It's been
-- it definitely has caused us to pick up the
tempo and focus with pipelines.

At TSA, it was a big driver for the establishment of a pipeline security assessment team, dedicated individuals out of our inspection force to get additional skills and training to concentrate on both pipeline inspection and pipeline assistance -- providing assistance in a variety of ways to pipeline operators.

So, this has been going on and working in the background with that was something that was disclosed here in May in a CISA-FBI Joint Alert, again, that is available on the CISA

website.

That joint cybersecurity advisory that was coauthored by CISA and the FBI provides information on a spear phishing and intrusion campaign conducted by state-sponsored Chinese actors that occurred from December 2011 to 2013 targeting U.S. oil and natural gas pipeline companies.

So, let me talk about that bullet for a minute. This information was known. That information was briefed to the pipeline companies that were involved in this and, again, that started a heightened degree of interest in what was going on that has seen the security directives, were a result of that other work with the National Security Council and focus on natural gas transmission pipelines as a source of, you know, fuel for electric transmission and their criticality to other sectors of the economy.

So, this is -- again, we've had knowledge of this. It's been working. At one

time it was classified at an extremely high level and it was only until May of this year that that could be determined that it was safe to release that information publicly.

It was released and is classified information both to government and private sector operators about that.

But the key line in that joint alert, and the alert is rather lengthy and it goes into not only what was detected in terms of the threats and the tactics, but also providing information about what can be done to help to protect information systems by outlining the tactics, the techniques and the procedures were used and the recommended mitigation actions.

In that report, CISA and the FBI assess that this activity was ultimately intended to help China develop cyber-attack capabilities against U.S. pipelines to physically damage pipelines or disrupt pipeline operations.

So that, you know, is a telling statement and it, I think, gives some of the

publicly available information as to background to why TSA, CISA, the Department of Homeland Security, PHMSA, the Department of Energy are concerned about these cyber threats and looking at a number of ways, either through policy or technology or practice and information sharing, to start being better able to defend against these threats.

It is a tough game, I will just say this with that, and I will readily admit that I am not a cybersecurity expert.

I have to be a policy jack-of-all-trades to a certain extent, but I have learned enough to understand that, you know, it is a tough game that we are playing with nation-state actors.

These are very well-provisioned, you know, government-supported activities that go on and they have the ability to do a lot.

And we are no -- efforts to counteract that, but it is a -- certainly a game -- to characterize it very simply, a game of tug and

pull, push and shove, as we work with it.

So, you know, the guidance that's put out about this to the industry, to the operators, is important and we hope that people are listening and taking it seriously.

Let's go to the next slide, Tim. So, you know, what are the implications for security? Well, you know, this is where, you know, security and safety truly overlap because if these cyberattacks, you know, are most, you know, the thing that keeps us up at night that we're most concerned about, is that the cyber-attacks on pipelines or other critical infrastructure, they're going to have the potential to produce kinetic effects that not just, you know, shut down a website, but actually get into operating technology systems or other industrial control systems and make things happen.

You may remember, you know, there have been attacks in the water sector where hackers were able to get in and actually manipulate metering valves to change the flow of treatment

chemicals at a wastewater treatment plant, you know.

Those type of things where cyberattack produces kinetic effects either to slow
the service, to reduce the efficiency or to cause
an operator to have to shut down for -- to
protect themselves or the potential for physical
damage if there's overpressurization or, you
know, a variety of tactics that can be used to
fool the system, you know.

They're not -- it takes a sophisticated operator to do it, but there have been demonstrations that there are people out there with that type of skill that have expressed an interest and an intent to do these type of things.

Next slide, Tim, please. And I think this goes back to you, Tim.

MR. GAITHER: Yes, sir. Thank you.

So, I think these are probably two of my favorite slides that Scott and I put together because one is about security and one is about safety and, as

Scott indicated, there's such a nexus between the two.

So, a shutdown of a pipeline or, you know, an explosion or a leak or a spill, all of those things while they're security forced by, you know, some sort of kinetic device or from someone using cyber to change pressure levels on the gauges that employees are not aware they're being changed on them and such, these things all can lead to the impact to our environment, to the public and to the employees that are working there, you know.

It's something we want to avoid, but both of those areas lead to some of the same results and that's why it's essential for us to kind of bring this together.

And I'm going to go back just a few slides real quick because I wanted to kind of close this section off with that.

This is a Jim quote, but it's really the perspective of our adversaries, whether it be a criminal state or another state actor or be a

criminal group. If it's important, you don't 1 2 You keep going no matter how hard it gets. quit. So, our adversaries are going to keep 3 4 going, they're going to keep pushing, they're 5 going to keep changing, they're going to keep adapting. 6 And on this side from a safety and a 7 8 security perspective, we have to keep doing the 9 same. 10 And part of, you know, what we're 11 doing is in that and so that's just something I 12 want to kind of throw out at you before we 13 continue to the next area. 14 So, the next area is that -- it's an annex of the DOT-DHS Memorandum of Understanding, 15 16 but that annex, for us, is really between PHMSA 17 and TSA. 18 So, the audit that was done in 2018 19 really looked at the relationship between the two agencies and what it's about is kind of 20 21 establishing that that boundary between the two

and exactly what we're supposed to share with

each other, which really is a lot of the security and the safety aspect of pipeline incidents as they happen.

So, the overview is -- it was really about, you know, PHMSA sharing anything that's an accident and, by our definition, spills. If we find out about, you know, devices put on a pipeline in a construction zone, different things like that.

If we find out about protests that are affecting an operator that causes them to shut down or someone is turning a valve, these are the types of things that we are sharing with TSA, as well as the Department of Energy, to make sure they're all aware of what's going on with the operators from different aspects, you know.

From TSA it's the security side. From PHMSA it's the safety. DOE is looking at the supply. So, we're all very heavily engaged in this.

On the other side of it TSA is, you know, supposed to share security incidents or

1 threats of pipeline infrastructure. In this 2 case, their critical pipeline infrastructure. But if they learn about something that 3 4 is, you know, a spill or release, anything that 5 kind of falls within, you know, PHMSA's regulatory authority, this is something that they 6 7 would share as well with us. 8 So, this document, for us, is really 9 about establishing what we're supposed to share, who we're supposed to share it with and how. 10 11 So, it really, you know, and I threw 12 in this last bullet because it really also goes 13 to support, you know, CISA with their 14 cybersecurity protocol. So, we are, at PHMSA, still supporting 15 16 Even though we don't necessarily have the 17 cyber expertise to do that, we do support them in 18 every which way we can when it comes to this. So, the next area is going to be the 19 20 TSA security directives and I will turn this back 21 over to Scott. Okay, Tim. Can we go to 22 MR. GORTON:

1 | Slide 17?

MR. GAITHER: We're there, Scott.
You're good to go.

MR. GORTON: Okay. I may have a delay. I'm seeing -- okay. I'm just going to go ahead and go and assume that everybody can see slide 17 because I'm seeing 15. I may be -- oh, it just changed. Okay. Thank you, everyone.

So, let me start off by laying the groundwork here because this gets asked, and has been asked here recently, about TSA's security directive authority because it was something that was not -- had not been exercised in surface transportation for a number of years.

Before this past -- this year in

January when we issued security directives to

implement the Executive Order on the wearing of

facial masks on public transportation, we hadn't

issued a security directive for surface

transportation since 2005.

So, you know, certainly, you know, not something a policy instrument that a lot of

1 people in surface transportation, including 2 pipelines, were familiar with. It is a regular instrument that TSA 3 4 uses with the aviation community with aviation and air cargo. 5 Security directives are a regular 6 7 course of business and are issues much more 8 frequently in aviation. 9 We never -- we had not had the need for, you know, better than almost 15 years to do 10 11 this, but this year we saw a change with that. 12 So, in response to the ongoing 13 cybersecurity threat to pipeline systems, TSA 14 used the authority that it has under 49 U.S.C. 15 114, which is the Aviation Transportation 16 Security Act, or ATSA, which is our enabling legislation and governs a lot of what TSA does. 17 18 So, that actually gives the authority 19 to issue directives to owners and operators of 20 TSA-designated critical pipelines. 21 And we're talking very specifically 22 here about what we did with the security

directives for pipelines.

The language -- and just in case somebody goes back and says, well, wait a minute, he said -- the authority in ATSA is much broadly worded for transportation security. It doesn't list the specific modes. I've taken a little literary license here to explain that.

What the U.S.C. does say is it authorizes TSA to issue emergency regulations or security directives without providing notice or public comment where the administrator determines that a regulation or security directive must be issued and immediately in order to protect transportation security.

And we have heard from a number of areas, both from operators and trade associations, and even a few people on Capitol Hill, that they had questions about using this authority.

And the case that we did with the security directives, we have responded to those. We think we are on firm legal ground and it, you

know, there was a compelling reason to do what we did and to do it in the way that we did.

It doesn't mean that certainly that we're going to do every regulation or every policy action through a security directive.

We will use the regular notice and comment and notices of proposed rulemaking and plenty of opportunity for input going forward, but it was -- the feeling was that circumstances were such that we could not wait months to go through the rulemaking process, that we needed to exercise this authority, and so we did.

Now, there are some checks and balances in this that once the security directives are issued, they can only remain in effect for a period not to exceed 90 days unless they are ratified by the Transportation Security Oversight Board.

And so, the Transportation Security

Oversight Board is chaired by the Deputy Security

of Homeland Security and representatives from

Department of Justice, Department of Defense,

Office of Director, National Intelligence,

Department of Transportation, all have a seat on
the Transportation Security Oversight Board.

And we had to present these security directives to the board and provided our case and our reasoning, and then they took that under consideration.

In the case of both of the security directives, the TSOB did ratify the security directives. And so, they are -- right now, they're in effect for one year from date of issuance and could be extended if it's necessary to do so.

Alright, Tim, if we could go to the next slide? Thanks. I think it's important to understand that, you know, when we develop these, we don't do them in total isolation.

Certainly critics, they would have liked to have had more time. I understand that. If we -- where we can provide, you know, additional time, we certainly will. We get that, but, again, there was a need to move -- to move

expeditiously on these directives, but we did
work with our government partners from the DOT,
from the Department of Energy and from -- and
FERC and with other DHS components like the Coast
Guard and CISA and the Cybersecurity Division of
CISA to, you know, lay out, you know, what is it
that needs to be done, how should we characterize
this, how should we do the scope to come up with
a good, good document that addresses the need and
also provides clarity without being overreaching.

We also work with industry provided that the drafts of the security directives to trade associations and they, in turn, provided that to the membership for comment.

We got a great deal of comments and some of them very instructive. We made changes along the way to both of the security directives. We have calls with the industry reviewers to discuss those.

As with anything, not all of -- we weren't able to accept all of the comments -- well, we didn't accept all the comments. I mean,

you never can, but we did take them very seriously and, in certain cases, made what I consider to be, you know, where significant entries were raised, we made appropriate changes in the wording or the provisions of the directive.

Alright. If we could go to the next one, Tim. So, we did have issued two security directives.

The first one was issued on May 28th of this year. The SD, or Security Directive, is applicable to owners and operators of hazardous liquid and natural gas pipelines that have been identified as critical by TSA.

And there is a process that started a number of years ago to apply certain criteria based on throughput service to other critical infrastructure sectors and critical locations and now national critical functions to identify the most critical pipelines.

The exact number of those pipelines is security-sensitive information. I'm not going to

detail that.

There have been numbers that have been in the media and press that are not far from the number. So, if you've read that -- but we do not publicly disclose that number.

The operators know who they are. We share that information with the right people at CISA and at PHMSA. They are aware of who those companies are and our reasoning for those, but it's important here that they -- and it will probably generate a question, you know, why not all pipelines?

Well, we did not think that all pipelines were under threat. We thought that it was the target based on other information that we have were on larger systems.

And so, we have addressed the -- again, the security directives are limited to critical pipelines.

Does that mean that other operators, other pipelines shouldn't report incidents to CISA or do -- follow the pipeline security

guidelines and look at that and, you know, take stock of how their practices line up against the guidelines? Absolutely not. We want everybody to do that.

The difference is in whether or not we put it into a mandatory regulatory directive.

So, we have limited the scope.

So, the SD required three things that we think are basic to moving forward to enhancing cybersecurity.

One is the designation of a cybersecurity coordinator, to have the companies designate somebody that we can use as a point of contact to exchange information with to make sure that we got the name and the phone number and email address of the right person at a company that we can send that information to.

Conversely if something were to occur on one of these critical pipelines, it is a point of entry, you know, a starting point for us to get information and to start coordinating activities.

That doesn't mean that that company is limited to only that person, but it's just somebody that can be the initial point of contact and then things can move from there as needed.

We've had physical security coordinators in other modes going back as far as 2008 with railroads and rail transit.

We found that to be very advantageous having an identified point of contact to be very advantageous for both government and industry.

So, we included it here.

The second thing is the reporting of cybersecurity incidents to CISA Central within 12 hours of identification of the incident. And the security directive goes into a lot more detail on what has to be reported and the different -- and I will say this, that we're not -- we're sending what we have, but this -- the whole concept of reporting cybersecurity incidents is going to be an ongoing discussion.

There are several bills right now on Capitol Hill under consideration to require

cybersecurity incident reporting across all critical infrastructure sectors, including transportation, a variety of different provisions and some different approaches to that, but it -there is a recognition that there needs to be information collected at a central point and CISA will be that central point so that they can amass data about what is going on, what are the tactics, the techniques, the procedures, who are the victims, who are the -- what are the vectors, are there similarities between what's being seen in the financial sector and what's being seen in the transportation sector, is there something similar between pipelines and railroads, for instance, and then how can that -- what can be done for that and what guidance, and then informing the operators.

So, it's a heavy burden on the government to, you know, collect this because our obligation is to make good use of that information to inform operators, you know, to analyze that and then give them back information

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that they can use to protect themselves and use that information to devise ways for government to do its job where it can and protecting industry.

So, there is a heavy obligation here and Congress has recognized that there is some -- and, again, and the legislation under consideration would establish a whole new office within CISA to be strictly with the objective of being a central incident reporting point and an office to manage all of this -- these activities because it is expanding.

People are voluntarily reporting to CISA now, but it's not, you know, I wouldn't say that there's consistency, but once it becomes law, you know, there will definitely be an uptick in the number of reports and, you know, there's room to grow and there will be a need to, you know, increase capacity to take in reports, analyze reports in a timely manner and that type of thing.

The third requirement -- I spent enough time on that one. The third requirement

requires conducting a self-assessment of the owner-operator's practices and activities in relation to the cybersecurity guidelines contained in the TSA pipeline security guidelines.

Those are guidelines that have been out there since 2011 in their current format.

They are something that we developed in close coordination with industry to come up with guidelines.

They primarily focused on physical security. There were updates made to the guidelines to incorporate cybersecurity. So, there is a section devoted to cybersecurity in those guidelines.

And we require the operators covered by the SD to do a self-assessment against those guidelines. They were provided with a template, questionnaire, whatever you want to -- however you want to phrase it, and they completed that and they submitted those results to TSA.

We, in coordination with CISA, are

1 analyzing those results to try to identify, you 2 know, areas, quite honestly, where can we help. Where did people say, yeah, we self-identified as 3 4 having needing to do more in this area or we 5 didn't have an in-place process to address this. 6 What can we do to assist with that moving forward? 7 8 So, I'm pleased to report that we have 9 100 percent compliance with all those provisions.

100 percent compliance with all those provisions.

It was issued on May 28th and everything in there had to be done within 30 days. So, we are -- we do have 100 percent compliance from all the covered operators.

And that was -- that security directive, the last bullet on there, was ratified by the Transportation Security Oversight Board on July 3rd.

Alright, Tim. Let's go to the next slide. I'm going to try to pick up the pace here in the interest of time.

So, the second security directive was effective on July 26 of this year. The SD

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applied to the same group of critical pipeline owner-operators covered by the first SD. We didn't add anybody to the group. It was the same group.

This security directive was issued as a sensitive security information document. SSI is a categorization of information that's used both by the Department of Transportation and TSA to protect information that the disclosure of which could reveal a security vulnerability or information about certain security measures.

With that being said, I believe in addressing things up front. It was SSI. There was a Freedom of Information Act request by the Washington Post for the security directive.

We honored the Freedom of Information request and provided them with a redacted version that had the security-sensitive information -- portions of the document were redacted and then the Washington Post was provided that.

So, this provisions part of -- a large part of the security directive was made available

by the Washington Post in association with an article that they wrote earlier this month.

We would have preferred that happen a different way, but it did and so we're working with the carriers because we've had a number of questions about sharing that information and could they share it.

We're working with the operators and the trade associations about giving them guidance on how they can share that and they can make that available.

They had been giving information to -because SSI doesn't mean that it can't be shared,
you can't share it with anyone, it just has to be
shared in a controlled manner with those who have
a need to know, a demonstrated need to know.

And so, that can be broadly interpreted for those who, you know, advise a pipeline company, state oversight boards that oversight, you know, they all may have a need to know for certain portions of a document. And so, we, you know, provided guidance to operators on

that.

So, I wanted to cover that ground about the security directive, but I am precluded -- because it was SSI, I am not going to -- I can't discuss all the measures that are in the SD, but to summarize -- and it would take a long time I'd be doing this for another hour or so and I don't think you want that, but the SD requires three major actions.

One, the implementation of critically important mitigation measures to reduce the risk of compromise from the cyber-attack. So, there are a number of things that are specifically listed that go to protecting both IT and OT systems.

Things about reset -- from resetting passwords, to network segregation, multifactor identification, a whole number of things.

Are these things easy? No. We recognize that they're not necessarily easy. We recognize that they are complicated depending on the size and scope of the operator, and none of

the operators subject to this are, you know, a small company -- well, some are smaller companies, but they all have complex operations from one aspect or another.

And so, we realize that and we made it clear in our communication that we will entertain proposals for alternative measures. If a pipeline believes that what's specifically required, they can have another way of achieving an equal level of security, we have a process where they can propose to us an alternative means to accomplish that.

We take that under advisement and then we'll either approve it or deny it based on, you know, a number of factors. We are currently considering those.

We had anticipated it going somewhat faster than it has, but we have wanted to be extremely diligent in making sure that any measures we approve or deny, that those are done with a full consideration of the implications for the operator and for security and safety.

There is also a provision in here in the SDs that if an operator believes that one of the mitigation measures like making changes to the OT system may jeopardize safety or degrade operations or have an adverse impact on operations, they're to let us know that, to contact us.

Don't take action until you talk to us. We'll take those -- again, take those under advisement.

We'll work with the appropriate persons at PHMSA, and possibly CISA, as necessary to evaluate the -- what we're being told and then to provide guidance on that going forward.

So, we are, you know, there are deadlines in this security directive, we've had - - many companies have met those deadlines, others have asked for additional time, and others have submitted alternative measures which are under consideration.

So, because it is complex, it's not cut and dry, many of these things are very much

tied to the individual means of operation and the way the business is done for an operator.

We're not -- our intent here is not to make things worse, it's to make things better.

So, we want to make sure that we all are doing the right things to get to where we need to be for security, but not at the expense of safety or operational capacity. That would be -- is very much counter to our objective.

The second thing that was required in the security directive is the development of a cybersecurity contingency/response plan to reduce the risk of operational disruption or significant business or functional degradation of necessary capacity should the information or operational technology system of a pipeline be affected by a cybersecurity incident.

More plainly said, a battle plan that clearly identifies how you are going to execute on the things you need to do to segment and protect IT system and the OT system. And if you

are attacked, how to -- how you're going to be able to continue on.

The next point is to --

CHAIR BURMAN: So, I'm going to stop at this point. I do think that this is really incredible information.

I know that people are going to have a lot of questions or comments and I'm wondering if this -- we may want to take a very quick 30-minute lunch break in a minute or two and then come back and follow up with the rest of the cybersecurity discussion as well as allowing folks time to formulate some comments that they may have or thoughts.

I know this is a really important one and I, myself, am processing a lot of it. So, I do just want to take a pause. I'm not sure how many more slides we have.

And, Alan, if you have any thoughts on our timing because I do want to make sure that we don't lose people who need to grab something quickly for lunch.

1	MR. MAYBERRY: Yes, I would agree.
2	This is incredibly informative. I just I
3	know, in the interest of time, I know we need to
4	we need to, you know, wrap it up.
5	We are going to shift the agenda a bit
6	here anyway after lunch, but I
7	MR. GORTON: Sir, I apologize. I am
8	going to be really tight on time. I've got other
9	meetings.
LO	I mean, I think if we want to wrap up
L1	here and see if there are any questions about the
L <b>2</b>	security directive, I can address those and then
L3	the afternoon I mean, if we have to, I'll have
L <b>4</b>	I guess I could go until 2:30. Again, I'm
L5	just trying to plan here.
L6	CHAIR BURMAN: Great.
L7	MR. MAYBERRY: Well, Madam Chair, with
L8	your indulgence, we could move the Q&A as well
L9	and then, for the record, have the presentation
20	posted.
21	CHAIR BURMAN: Yeah, I think that's
22	great. Why don't we see if there are any

questions? If we have you to 2:30, also, we could do the Q&A now; but then if you're here right after, we'll come back quickly, meaning we'll do a 25-minute lunch just so people can, you know, take a break for a moment.

With that, does anyone have any questions or comments that they want before we continue? And don't apologize. This is a very important topic.

Okay. I do see Dave Danner and Andy
Drake and then Bill from Pipeline Safety Trust.
Dave?

MR. DANNER: Yeah.

CHAIR BURMAN: I just want to remind folks to introduce yourself on your name, your title -- excuse me, your organization as well as which committee you sit on. Thanks.

MR. DANNER: Thank you. I'm Dave

Danner and I'm the chair of the Washington

Utilities and Transportation Commission, which is the utility regulatory body in the State of Washington. And I'm a member of the Gas Pipeline

Advisory Committee.

My agency regulates the rates and services of local distribution companies in the State of Washington.

And insofar as the security directives may impose new costs on them, I'm concerned because the only way that these companies can recover those costs is to raise rates.

And the only way they can raise rates is through an adjudicative proceeding in our state -- at our state agency, which is public and involves a number of interveners and public testimony.

And I'm concerned about how we get
matters into the record where we can determine
the prudency of expenditures when those matters
involve security-sensitive information that can't
be disclosed publicly.

And so, I would -- it might be something that we'd have to discuss offline or, you know, in a different setting, but I just -- that's a big concern that we're imposing new

costs on these regulated utilities and they won't be able to get those costs back except through a public proceeding. So, I'd certainly like to hear your thoughts on that.

MR. GORTON: I think we will have to talk about that in another forum. That issue has been raised and we provided guidance to those that are publicly regulated, those pipelines that are subject to those situations that you just mentioned.

We did provide guidance to them about how they could communicate appropriately about those measures that they are required to implement.

I think it, from what you're saying, it may take -- require further discussion and I am -- I just -- I would not want to weigh in right now about the particulars.

I'm not an information law attorney.

I mean, I understand generally what the

restrictions are and what -- some of the ways to

get around those restrictions legally, but that

1 may -- that is something that we would have to 2 discuss, but that was something that was brought up to us and we have done some work with the 3 4 operators, in particular, providing guidance to 5 them to help assist them with that. Well, I appreciate that. 6 MR. DANNER: 7 I think that any guidance you can share with the 8 regulators as well would be very helpful. 9 thank you very much and thank you for your presentation this morning. 10 11 CHAIR BURMAN: Thank you. We're going 12 to next go -- and, Dave, you can put your hand We'll next go to Andy Drake and then Bill 13 down. 14 from Pipeline Safety Trust. Thanks, Chairman Burman. 15 MR. DRAKE: 16 This is Andy Drake with Enbridge with the GPAC 17 Committee. 18 I want to pick up on something that 19 Alan mentioned and that is I'd like to make sure 20 that we get this material more than posted to 21 this docket or to the GPAC proceedings.

I think this is really important

information to be disseminated to the trade associations and the public and others and we're going to have to figure out how to create a line of sight into this information.

I just want to kind of go on record on that. This is really important to get this out to a broader audience.

I didn't even see any slides in preparation for the meeting, so I really -- this is great information. I just want to make sure we get it out there.

CHAIR BURMAN: Okay. Scott, did you want to respond to that? Do you think that that's something that you can help facilitate?

MR. GORTON: Yeah. I'll work with Tim Gaither and the other appropriate persons at PHMSA about getting this available as part of the record or we'll have to go back and double-check and make sure for public-public, I mean, like without restriction posting on a website.

But as far as being part of the record, the Committee, you know, we're okay there

with the information that's in the slide deck, 1 2 but I appreciate the comment that, you know, wider -- they think there could be usefulness for 3 wider dissemination. 4 We have shared this information, I 5 will just say, with all the pipeline trade 6 7 associations. The elements here about the threat and the need, that has been widely communicated 8 9 to those individuals and to individual operators. That has been -- has certainly been done. 10 11 CHAIR BURMAN: Okay. Thank you. 12 Next, we'll have Bill from Pipeline Safety Trust 13 and then Ron Bradley. Thank you. 14 MR. CARAM: Yes. Thank you. This is Bill Caram with the Pipeline Safety Trust. 15 16 member of LPAC and thanks for your presentation. 17 I was curious if you could give a 18 sense of how much of our pipeline facilities have 19 been identified as critical. 20 And the reason I ask is certainly with 21 Security Directive No. 1, it's pretty 22 straightforward, a common-sense regulation, and

so curious how much of our operators are -- how 1 2 much of our facilities will be subject to that. And I'm sorry, sir, how 3 MR. GORTON: 4 many -- whose facility? I missed that part, sir. 5 Just a sense of, you know, MR. CARAM: miles of pipeline or number of operators that 6 7 have been deemed critical. MR. GORTON: Yeah. As I said before, 8 9 I can't -- the number of exact -- the exact number of operators is sensitive security 10 11 information. We're not disclosing the number of 12 operators. What we have said publicly is that the 13 14 operators covered by the SD handle 85 percent of 15 the nation's throughput. So, it is the largest 16 companies, you know, providing throughput. There are some that have because of 17 18 their particular location and the industry or 19 other customers they serve, makes them critical. 20 So, it's a variety of factors, but 21 throughput is the predominant factor. 22 MR. CARAM: Thank you.

Okay. And thank you so 1 CHAIR BURMAN: 2 Bill, if you can take your hand down, much. Ron Bradley? 3 great. 4 MR. BRADLEY: Good afternoon. Ron 5 Bradley from PECO with the GPAC. Scott, thanks for your presentation. 6 7 Just a quick question going back to 8 Mr. Danner's comment about the Commission and the 9 coverability, et cetera. Would you consider TSA speaking to 10 interveners in some of the rate cases or is that 11 12 off limits? That's an interesting 13 MR. GORTON: 14 question. I think I'd have to think about that. I'm not the -- I'm going to be honest here. 15 16 not sure of the role of intervener. So, I better 17 be careful about answering the question or 18 providing an answer without fully understanding 19 the question. 20 MR. BRADLEY: I appreciate that. Ι 21 understand. You know, I know from those who were involved in the security directives because, 22

since obviously we can't state, but I know those 1 2 that are involved, it's a very big burden. It is a lot of work. It has taken a 3 4 great amount of effort and there's a commitment 5 that's, you know, it's just really resourceintensive and it's -- I think it's going to 6 Thank you. 7 require more discussion. 8 CHAIR BURMAN: Okay. Thank you. And 9 then I think there are -- I don't see any other comments from GPAC or LPAC. 10 11 Before I open it up to attendees, I do 12 know there's some questions there, making sure 13 there's no one else. 14 Okay. Now, I'm going to go to the attendees. John? 15 16 MR. STOODY: Hello. Thanks. John 17 Stoody here with Association of Oil Pipelines. 18 Thanks for doing this joint TSA-PHMSA briefing. 19 And we've certainly worked with TSA as 20 described to the trades and I wanted to really 21 ask a question on this PHMSA-TSA MOU. And the slides seem to characterize it 22

as primarily information sharing back and forth between the agencies and my comment was on the need for an ability to participate more on policy development and program implementation.

The trades, as you've described, we've worked on this issue universally, gas, liquid transmission, distribution.

We felt that the security directives, if implemented as written by TSA, would disrupt operational pipeline systems. And because operational and safety systems are intertwined, would threaten the safety of those systems.

So, you did mention the alternative implementation process and then also the action plans for those seeking more time to come forward with additional measures.

Both of those depend on the pipeline operational challenges each operator faces.

PHMSA appreciates those types of issues.

It's our understanding that the review of the security directive, it's fairly cursory, the opportunity provided and there was a limited

sharing of concerns about the security directive, so seems like there's a potential to expand or improve on the role of PHMSA helping with policy development and program implementation.

So, I wonder is there something in the MOU or other types of agreements that can be changed or added to or acted upon that would enhance the interaction between PHMSA and TSA when it comes to these pipeline operational and safety issues?

MR. GAITHER: Go ahead, Scott.

Yeah, I'll take that.

You know, John -- and I know, John, you're familiar with a lot of the work that we did -- there's always room for improvement. I mean, I would never say there's not room for improvement.

MR. GORTON:

Was there a need to do some things expediently? Would we have liked to have had more time? Yes, given all things considered.

We will continue to refine -- these security directives are not, you know, I'm trying to think of the right phrase.

The good thing about security directives versus regulation is it is easier to change.

If we realize that we've done something that does not have the intended effect, we can easily rescind or change something in the security directive much easier than we could with an existing regulation. So, we, you know, that's one advantage to the security directive.

Have we learned lessons through this exercise? Most definitely. About, you know, how we can better coordinate, communicate, get to the right solutions to problems, yeah, we've learned a little bit about all those things. So, we take that to heart and we'll use that to improve.

The MOU, you know, does talk about this, you know, but it's an MOU. I mean, it doesn't -- it's a master plan, you know. It's not a, you know, a specification sheet.

So, it, you know, it does speak to this. You know, we have the objective, I have the objective of, you know, continually improving

our communication or coordination with our government partners be it PHMSA or the Federal Railroad Administration or Federal Transit, you know, all the groups that have a joint interest in, you know, because our interest, as I said at the beginning, and I just can't say it hard enough, our interest with the security directive was to protect pipelines, not to imperil them.

So, we've tried, as loudly as we can, to make that clear that if an operator thought that doing something in the security directive was going to jeopardize safety, tell us about that so that we can have a conversation and figure out the right path, the right course of action, because we absolutely do not blindly want somebody to go, well, they told us we got to do it, and then they do something that is harmful. That's not what we want. Absolutely not. Thank you.

MR. GAITHER: Thank you.

CHAIR BURMAN: Okay. Does anyone else have any other comments or questions at this

time? I'm going back to GPAC or LPAC members. I see none at the moment.

Now, I'm going back to the public and I don't see any from attendants. I do think this is really very helpful. We are making an agenda change in a moment. I will talk about that.

I do want to thank you. I want to also especially say thank you to you coming from TSA giving us this overview and details.

There's been a lot of different directives recently and especially as you outline the one that looked at the three critical issues, which was identifying a corporate-level cybersecurity coordinator, as well as reporting the cybersecurity incidences to CISA, and then also looking at the self-assessment and taking that into consideration.

I think I did hear a common theme among both the committee members as well as the attendees, that there is a need for continuous improvement in collaboration and drilling down and utilizing and engaging with PHMSA and the

experts through PHMSA's advisory committees as well.

I think some of the common theme also is how can we ensure that we get out critical information to the public that can be helpful, informative information, but also due to the sensitivity of a lot of this, it's really imperative that we don't have just a knee-jerk reaction of spitting out information to folks even if it's through a FOIA request if the unintended consequences is perhaps, you know, making things more vulnerable by sharing information that should not have been shared, you know, in that format without some sensitivity discussions on ensuring that we're protecting our vulnerable assets.

Truly all of us are engaged in making sure that we do all we can do in these critical issues especially as we have some incredibly bad actors that we need to all collectively work in defense of. So, I appreciate that and continuing the dialog with TSA especially as it relates to,

you know, what it means on the ground in the 1 2 relevant states and putting it into operation. With that, does anyone else have any 3 4 other questions or comments as to this agenda and 5 we'll follow up on that? Hearing none, I do just want to let 6 7 folks know now, and I'm going to have you come 8 back in a moment, just to make sure we're on the 9 same page for a quick break, but we are going to 10 be moving Agenda Item 9 up when we come back from 11 the break. 12 And that is on the Section 114 issues, 13 briefing on the implementation of Section 114. 14 And then the other agenda items, at this point, will follow right after that, but Agenda Item 9 15 16 will become Agenda Item 6 and we will take a 17 short break. 18 Alan, do you want to say 2:25? 19 MR. MAYBERRY: 2:25, that sounds good. 20 We'll do a quick break. 21 CHAIR BURMAN: Okay. 22 MR. MAYBERRY: A few of us need to

1	grab something, but thanks.
2	CHAIR BURMAN: Okay. Great. Thank
3	you so much.
4	(Whereupon, the above-entitled matter
5	went off the record at 1:59 p.m. and resumed at
6	2:26 p.m.)
7	CHAIR BURMAN: We're now back from a
8	short break. We are going to be continuing with
9	our presentations today.
10	Just a reminder to folks that we will
11	stop at about 6:00, and then tomorrow, we have a
12	full agenda, but not as long. I think the time
13	is 10:30 to 3:00. Does it start at 10:30 or does
14	it start earlier?
15	MR. GALE: Diane, it starts at 10:30.
16	CHAIR BURMAN: Okay, great.
17	MR. GALE: We anticipate it being done
18	by 3:00.
19	CHAIR BURMAN: Great.
20	MR. GALE: If it needs to go a little
21	over, it will be fine, but we anticipate that it
22	will be complete by 3:00.

CHAIR BURMAN: Great, okay, so 10:30 Eastern Time. I do just want to kind of -- we did move around the cybersecurity one and had it before lunch. We were short for time, so we did cut off some of the presentation, the PowerPoint itself, and opened it up to questions.

I know that this is a very sensitive area. I want to thank PHMSA for its engagement with the committee as well as other stakeholders who are really interested, and the TSA MOU agreement.

I do know that some of the sensitivity is also about how to ensure that those experts of industry, as well as the regulators, as well as other stakeholders who can be helpful with the engagement with TSA are very much included.

It's not enough at times just to reach out. You really do need to fully understand and work through any challenges, especially when it comes to sharing of sensitive information and the protocols in doing so, to ensure that we're doing all we can to not create an unanticipated risk

with that.

With that, we're now going to go to the new agenda item six. Rod, I think you go first in the presentation, and then if you need help with anything, let us know. Thank you.

MR. SEELEY: My slides are up?

CHAIR BURMAN: Yes, we can see them.

MR. SEELEY: Very good, thank you.

So, I'm going to give a very short overview of the hazardous liquid rule that was published in October of 2019. I know time is short, so these will be very short so you can move onto the gas rule and then the 114 implementation.

My name is Rod Seeley, National Safety
Coordinator for the Office of Pipeline Safety,
and I was the lead on the implementation of this
rule.

As a little bit of background, the rule was published in October of 2019. We call it the new liquid rule. The effective date of this rule was essentially July 1 of 2020, but various sections within that rule had different

effective dates and I'll get into that in just a minute.

As far as the implementation program that we started in late 2019, PHMSA conducted outreach to various stakeholders. We have a public meeting in Houston, or rather Sugar Land, Texas in February of 2020.

We met with NAPSR virtually on multiple occasions during the summer of 2020, and the implementation team developed the inspection content or the questions, if you will, and we trained both federal and state inspectors throughout the summer of 2020.

After July of '20, after the effective date went in place, the hazardous rule inspection responsibility transitioned over to the federal regions and the state inspectors, so that would have been the fall of 2020 in what they would have incorporated (audio interference) they would have incorporated that into their normal inspection regimes. So, for the federal, they would have integrated the new hazardous liquid

rule regulatory requirements into what we call our integrated inspection process.

As mentioned earlier, there are various effective dates of the rule. On the screen, you can see the various sections of that rule that are in effect today.

Some of the larger ones are like the extreme weather inspections that went into effect. Some of the leak detections for new pipelines are in effect, and there are various integrity management additions that are in effect.

Obviously, there are the selfexecuting portions, the data sheets and the
integrity assessments for a certain pipeline, and
the reporting requirements are all in effect, so
those would be available for inspection as we are
going on right now.

There are some sections that are not in effect yet, and so that will be rolled into future inspections. For example, the leak detections for existing lines. That requirement

kicks in in 2024, assessments outside of an HCA, 1 2 that's kind of a tricky one. The assessments have to be completed 3 4 by 2029. An operator could begin that at any 5 time, but they're not technically required to be completed until 2029. 6 7 The new information analysis addition 8 under 195 452G go into effect in 2022, so that 9 will probably -- that will be a larger focus in the next year's inspection cycle, and lastly, the 10 11 requirement to accommodate ILI and HCAs, that has 12 a final requirement of 2035. And I know this was quick and it was 13 14 short, and I wanted to reel back some time for 15 the gas rule implementation and for the 114 16 discussion, so I will turn it over to Chris 17 Hoidal. 18 MR. HOIDAL: Thanks, Rod. Are you 19 seeing my screen yet? 20 CHAIR BURMAN: No, not yet. 21 MR. HOIDAL: Okay. 22 CHAIR BURMAN: I still don't see your

1 screen. 2 MR. HOIDAL: Interesting. (Simultaneous speaking.) 3 4 CHAIR BURMAN: It's up. 5 MR. HOIDAL: Okay, there was a 6 considerable delay. Sorry about that. 7 okay, so this is Chris Hoidal. I'm a Senior 8 Technical Advisor for the Program Development 9 Division. And I too, I took a similar approach 10 11 to implementing the new 2019 gas rule that Rod 12 did, but due to the complexity and the number of 13 requirements of the regulation, we took a 14 slightly different tack. 15 We had to spend more time clarifying 16 the regulation, you know, communicating 17 expectations to the operators, as well as 18 significantly more time training the inspectors. 19 That said, it is a similar strategy, and unlike where hazardous can kind of roll --20

the hazardous liquid regulation can be rolled

into the existing inspection framework, we're

21

recommending that the 2019 gas rule inspections be done as standalone inspections.

So, real quickly, I know there's a lot of liquid people in the room and there's some people just need a quick refresher of the rule.

This won't take long. This presentation is derivative of what I gave to the AGA a couple of weeks ago in Orlando.

I'm just going to focus on the real, near-term implementation dates, and when I say near-term, what we're telling the inspectors to focus on now, some compliance tools that have been posted for both the states and the pipeline operators and the public, our strategy and training, and then some areas where there's a little bit, despite all the coordination, and collaboration, and clarification with the operators, there's still a little bit of areas that need to be further clarified.

So, today, I'm just going to talk about RIN 1. You know, for the people that don't know this, this was a painful process that went

on for ten years, but RIN 1 is what came out in the 2019 gas rule as part of what used to be called the mega rule. It's been split into three.

RIN 1 only talks about the mandates and the NTSB recommendation, mostly what came out of the 2010 San Bruno incident that killed eight, you know, and 38 hours destroyed, as well as the 2012 Sissonville incident that shut down I-77 in West Virginia.

RIN 2, once RIN 2 comes out, we expect that that would be rolled into our training, and our FAQs and, you know, positive inspections that we did for RIN 1 since we expect that will be an expansion of --

Well, RIN 2 would be an extension of what we're doing for RIN 1, and then gas gathering is still pending, but I don't think that fits well within RIN 1 and RIN 2.

So, the two primary things we've been training the operators, I mean, not the operators, the inspectors on is the MAOP

reconfirmation process, and we got 15 years there, the material verification that's needed to support the MAOP reconfirmation process.

One of the things that operators need to realize, material verification goes beyond just MAOP reconfirmation needs. It's also needed for repairs. It's needed for engineering and critical assessments.

So, material verification is still very much a needed process that goes beyond just whether or not you need MAOP reconfirmation.

And the second big part of the rule is assessments outside of HCAs. Our training and our outreach also discusses long-term receiver safety and MAOP exceedance reporting and other changes to IMP, but the focus for the inspectors has been those first two long-term programs.

What we've been telling inspectors are to focus on these yellow highlighted items.

There's dozens of crumbs in the regulations. You guys can read this.

A lot of these requirements were due

July 1, 2020, but because of the stay of enforcement that was issued by PHMSA, only the reporting aspects, you know, only the reporting aspects were required to be followed up on.

You know, operators were still encouraged to implement procedures that addressed parts of the rule that didn't have specific timeframes.

They needed to start recording their class location designations and how they determined it, and begin to identify which pipeline systems were going to be covered by the regulations, including which ones were going to get assessed.

The bulk of the regulation though became effective just a few months ago. They needed to start using the new incident report form that's posted to the docket.

They needed to start developing MAOP reconfirmation processes and procedures, and that included the fact that hey, in order for me to do these MAOP reconfirmation processes, I needed to

know where my MCAs were.

MCAs are moderate consequence areas, and just to remind everybody that didn't go through the painful rulemaking process over the last time, moderate consequence areas are anywhere where the potential impact radius of the pipeline impacts five or more habitable buildings or impacts a major roadway.

Long-term receivers had to be retrofitted or replaced to allow for the depressurization and identification whether there was any pressure in the barrel. We expected to see preliminary assessment plans for assessing moderate consequence risk pipelines.

We expected to see preliminary plans for reconfirming the MAOP. You know, you have six different methods to reconfirm MAOP. If you started to do that, you needed to do it in accordance with your new procedures, so a lot became due this July.

And lastly, even though it hasn't been approved by OMB yet, the annual report for

anything that supports the 2019 gas rule, that was posted this June.

The first new annual report submittal date is next March. They need to report on all MCAs, how you're reconfirming MAOP, how many 192-710 pipelines have been assessed.

That all needs to start next year, and like I said, that's posted to the PHMSA website as well. That though, there is some sections that haven't had OMB approval.

The takeaway from this is whatever is posted right now is probably what you got to use, and if anything happens to what's posted right now, it's going to be a subset of what's there now.

All right, so this one I'm going to talk about, the most important thing is what we have done with communicating our expectations to the industry of what we believe compliance would look like, and we did this through the use of frequently asked questions and publishing inspection forms.

So, like Rod said, you know, we too did, we crafted frequently asked questions based on requests we got from industry, state and federal regulators, and the public.

During the last administration, any comments, anything we -- basically our draft responses, we had to put them out there for public comment.

We got our comments back. There was a lot of them, but it was almost like a little mini rulemaking process. We had to address the comments in our final answers.

And because we had gotten so many requests, we actually started batching the FAQs. The first batch of FAQs went through the public comment period and we posted our final responses last September.

As we were posting the final responses, we got a request for 24 more FAQs.

Those responses have been drafted. They have been posted. We got comments back, but they have not -- they're still under legal review.

I will say this. The draft responses that were posted to the docket and what we have proposed that is going under legal review right now, there's not much difference. There's, I'd say, two FAQs that are, I would say, more controversial.

And this is where you guys could find both the draft responses, the comments back to us, and then the final responses.

Okay, your questions, what we did with this is we used the FAQs as kind of a touchstone for what we consider to be adequate under the final rule.

So, PHMSA's policy is we have a question set of how we're going to ensure compliance with the new regulation. The pipeline operators have that same set, but it doesn't have those enforcement considerations.

So, you have three buckets out there.

You got the federal compliance set, you have a
mirror image that the states are using, and then
you have a public set that the operators can use,

and the only difference between PHMSA, and the states, and the public set are the fact that the operators can't see our enforcement considerations.

There is 69 questions associated with the gas rule. About 30 are procedure related, about 30 are record related, and maybe eight or nine observation questions.

What's a little bit different about this question set is we reordered them so they appear -- and again, the pipeline operator's version looks like the state version, which looks like the federal version.

They're ordered in a format that, basically in a format that's most usable by pipeline inspectors. So, when an inspection unfolds, you guys should be looking at things unfolding in the same manner.

Another thing we did with the inspection, and this is different than other posted inspection questions, is we actually added flowcharts and diagrams to aid in the

implementation of the regulation.

So, you know, everybody can read the regulation, but some people like to see flowcharts and diagrams of how to best implement the regulations.

So, when you go -- when the operator downloads the inspection questions, he'll see about 20 or 30 flowcharts and applicability drawings appended to the back end of the inspection questions.

Strategy and training, we did five pilot inspections. These companies, they basically volunteered. We told them, you know, we would identify things that were good practices, things that needed a little bit of work, and things that, if they were not corrected, would lead to enforcement.

There was five companies done. The pilot inspections were used, like I said, to tweak expectations, tweak our FAQs, and actually tweak our inspection questions, and we only focused on the five or six most important aspects

of the regulation.

These are the companies that were involved in the pilot inspections, Boardwalk, Iroquois, Louisville, Dominion Energy, and Southern Star.

National Grid was kind of a limited pilot. We only focused on in situ testing to collect material attributes, but these six companies, they did go through the inspection process and they were all different.

They all had different methodologies.

They all had different processes, but the one central good thing from all of these pilots, they all had great recordkeeping systems.

They basically utilized their GIS systems to house all their attribute data. I was really impressed. You could tell they had been working on these for years.

There is some areas that need attention. Sometimes it's not clear whether a pipeline is grandfathered or not. Sometimes operators think that they have hydro test

compliant records when they're not.

Operators always didn't do a great job of defining what we call opportunistic digs. You know, that's basically opportunities to select material attribute data in situ or destructively, either one.

Some of the companies didn't think that they would need an ECA analysis to reconfirm their MAOP. I thought that was a little short-sighted because not everybody is going to read hydro tests. Not everybody is going to take a pressure test. Not everybody is going to be replacing pipe.

There may be times that you need to do an engineering critical assessment to evaluate the MAOP of the pipeline. The only thing if you want to use an ECA, it's predicated on having good ILI data and good material data.

Training, we have trained 59 state inspectors through our TQ, well, basically virtual platform. These 59 state inspectors are from 43 state programs.

So, only a handful of states -- you know, Alaska and Hawaii don't have state programs, so only a handful of states have not gone through this training. Other states like Texas and California sent multiple inspectors.

There are 22 federal inspectors

trained from five PHMSA regions, so we have a

cadre of people trained to come out and start

inspecting your systems. Again, the key focus of

the training is consistency and clarity, so I

think we're off to a good start there.

One thing we weren't expecting, we had to do a renewed emphasis on MAOP determinations, class location studies, basically things that have already existed in the regulations, because these are all precursors to applying the new MAOP reconfirmation regulations, so we had to do a renewed emphasis on these topics, and the interstate systems obviously will be targeted by PHMSA.

GRIT, that's the Gas Rule

Implementation Team which consists of four PHMSA

people as well as two state people, they were provided a prioritized list of what pipeline operators should be looking at first, and generally, and this is generally, they are grandfathered pipeline systems that may have class three, four, and HCA areas.

Because of the annual reporting not being required, the new annual reporting not being required until next year, this is how we had to start.

So, obviously the bigger companies like the TransCanadas and the Enbridges, they're going to show up first, but, you know, after they're done --

And the Gas Rule Implementation Team will be attending those inspections, then we'll get to the pipeline systems that have less grandfathered pipeline, and then move onto post-1970 non-grandfathered pipeline that has class three, four, and HCAs.

Your PHMSA people and our interstate agents will be using the inspection system

software. For the interstate pipelines, if there's -- NAFSER (phonetic) has the analog version of the inspection assistant questions that are virtually identical.

And these are the four topical areas that still seem to be what I call areas needing, areas that I would say there's still a little bit of delta between what we expect out of the regulations and what operators are providing.

of these four, MAOP reconfirmation applicability, you know, whether or not their pipeline even, you know, it falls underneath the new regulations; non-TVC hydro tests, just because a TVC hydro test may have been accepted in the '80s, if they don't have the key components of a hydro test, we may not accept it; opportunistic dig definition, we really want to make clear that operators should be collecting material attribute data even if they don't have to do MAOP reconfirmation; and then also the proper application of engineering critical assessments.

Considering how large the rule is and 1 2 how many moving parts it has, really the areas still needing clarification are not that big. 3 4 I'll turn it over to Byron. Thank you. 5 CHAIR BURMAN: Byron, we 6 can see your screen. Thank you. 7 MR. SEELEY: Byron, you may be on 8 mute. 9 MR. COY: Sorry about that. I'm going 10 to talk to you about the inspection program for 11 Section 114. 12 Section 114 for inspections and the 13 inspection process is made up of three parts. 14 The first part is focused on the reduction of natural gas emissions, those from a fugitive leak 15 16 and those from intentional releases through 17 operation, maintenance, and emergency response 18 activity. 19 So, because it's focused on natural 20 gas, you know, the principal engagements on this 21 topic will be for those operators who transport

natural gas, but there are a few non-natural gas

operators who use natural gas for power or controls implementation, actuators.

So, our interest for emission reduction would be for some hazardous liquid operators. It's only in regard to how they use and manage the natural gas emissions in their operations. There would be very few of them.

The second part of 114 talks about the remediation or replacement of leak prone pipe, so this would affect natural gas emissions, but also, you know, the persistence of leak prone pipe, you know, poses a threat and, you know, a danger to the public and the environment.

The operator trends in this regard,
you know, are to address the systematic or
problematic areas for recurrence of leak issues,
you know, based on material, design, operating
practices and maintenance history.

The language of the act specifically calls out cast iron, unprotected steel, wrought iron, and certain plastics, but it's not exclusively those types of materials. There are

materials as well that the operator may have identified that persist in their operating system.

And certainly the last part of the 114, very abruptly, we wanted to be accommodated in operators' programs and procedures, but we don't want those efforts at the expense of safety, and that the safety for the public and the environment is to be maintained or, you know, improved where practical. You know, we don't want changes made for natural gas emission, et cetera, to impact safety.

The inspections that were mandated to perform are across all pipeline asset types, various asset types that, you know, transport natural gas, but also hazardous liquids, you know, for leak-prone pipe issues and for hazardous liquids that would use natural gas in their process.

The inspections that we ask to perform, there would be thousands of them. They would be performed by PHMSA, and a ton of

inspections would be performed by our state partners, and all of these inspections are supposed to be completed across 2022.

The objective of those inspections is to determine the adequacy of the operators' programs to accommodate the instruments for natural gas emission management and reduction, and the further efforts for the remediation and replacement of leak-prone pipe.

And 2022 will be the first trip to inspect all operators, but we will be performing that process into a five-year cycle, and we'll spread the inspections out over, you know, a longer period of time and blend it in with the other inspections we're already engaged in.

We based our work on the recerts that EPA had done to determine the source of natural gas emissions, and a lot of emissions and transmission comes from compression stations and compression station equipment.

The amount of methane releases, you know, are down from the previous year, so there's

already a lot of work engaged in this process.

The EPA is very engaged with gas transmission operators.

And in our initial review of work that operators are engaged in, a great part of the expectations we have for Section 114 are already at least partially and sometimes accommodated in the work that operators are already performing.

For gas transmissions, you know, the majority of the source of natural gas here is through leaks through service lines and mains.

They're a factor coming into play as well.

The EPA is not quite as engaged with the distribution companies as they are with transmission.

The team we've put together to create our inspection criteria is made of, you know, a number of federal staffers and also from the state programs. We've come up with the eight topic areas that you see here.

Each of those topic areas has a few questions. The total of the questions that we

have to use is 34. We may make adjustments to those questions as we near completion of our work and in preparation for the rollout in January.

No one asset type would be the recipient of all 34 questions, and the questions that are put together, there's one for transmission, one for distribution, different types of gas, et cetera.

We also have done or are doing the pilot inspections, the first of which we did in Ohio late in September, and we'll be wrapping up here next week. We tried to make sure that we covered at last two pilot inspections for each of the asset types.

We will be regrouping here in a couple of weeks to, you know, gather up our lessons learned on these pilot inspections to adjust our question sets, maybe shuffle them as needed, maybe add or take away questions as appropriate.

So, after the pipe check, you know, was published December of '20, we engaged in the process. We put out an advisory bulletin earlier

1 this year reminding operators of what the 2 requirements were that were laid out in Section 114. 3 We're just about wrapped up developing 4 5 our inspection criteria and our pilots. We'll be finalizing our inspection material early in 6 7 November, and then we'll have inspector training 8 for federal and state inspectors in late 9 November, and we'll be rolling out to begin inspections in January. 10 11 Because we have so many inspections to 12 complete all in the one year, we're going to have 13 to get out there early in the year to be able to 14 get all of that work accomplished. That's all the material I've brought 15 16 with me along today to share with you. Ms. Burman, I think we're 17 MR. HOIDAL: 18 ready for questions. 19 CHAIR BURMAN: Yes, thank you. So, 20 first of all, thank all three of you for 21 presenting. Now I'm going to open it up to anyone who has questions. I think we're going to 22

do this in two parts.

First, we're going to have questions on the HL and GT, the hazardous liquids and gas transmission questions, and then we'll go to questions on Section 114 more specifically.

So, for those who may have a question or a comment on HL and GT, please raise your hand so that I can call upon you.

All right, I don't see anyone in the GPAC or LPAC with any questions or comments on HL or GT. I'm going to go to the attendees. Okay, and I see no questions. Oh, one question. I'm going to go back to Andy Drake.

Again, just to remind folks, please say your name, your organization, and if you are on GPAC or LPAC. And we do have some others now who are raising their hands, so, great. Andy?

MR. DRAKE: Thank you, Commissioner Burman. This is Andy Drake with Enbridge with the GPAC committee.

I really want to go back to a question actually more for Chris Hoidal who was talking a

little bit about Subpart J records, Subpart J compliance records.

And I think it was for the hydrostatic testing in particular and there was a comment about if you're not grandfathered, you know, or that you declare that you're not grandfathered, you need to meet Subpart J requirements.

I think that the committee really deliberated over the records with regard to hydrostatic testing explicitly because, grandfathered status or not, these pipes were built before the regulations and we recognize that they wouldn't meet Subpart J recordkeeping requirements.

And we were trying to figure out how to define a reasonable and practicable solution because part of our charge on the committee, you know, we put down records specifically about providing guidance in the transcripts.

And I would encourage the group to go back to some of that guidance, especially in areas where there's uncertainty, because this is

a significant issue for people, you know, to try to meet current hurdle rates on Subpart J, you know, recordkeeping requirements.

(Audio interference.)

MR. HOIDAL: Okay, the approach we've done, Andy, is obviously if it's post 1970 after the code existed, 517 has explicit requirements of what records need to be kept. You know, you're talking about medium duration, accounting for elevation.

We realize Subpart J didn't exist

prior to 1970 and, you know, they're following

B318, and they didn't even have a duration back

then, but that said, a lot of companies did stuff

that was just as good as a Subpart J hydro test.

Maybe they're missing one thing.

We did put -- you know, we have been training our inspectors, listen, if they have the key components of a Subpart J hydro test -- and they don't have to be perfect.

Let's say they're just missing a signature, you know, or let's say they're missing

elevation, we don't have a problem with them going back and adjusting for elevation after the fact.

So, we realize that B318 did not have those requirements, and we've been training the inspectors to use some judgment of what's accepted, but at the same time, we've looked at stuff where we see affidavits 16 years after the fact where somebody said oh, yeah, I witnessed this back in 19, you know, 61, you know, and signed in 1975. Yeah, we're telling our guys that's not good enough.

So, that deviates a little bit from the white papers that were done back in 2016.

So, we agree with a lot of what the issue said, but in cases of, you know, where they just weren't TVC records, we did tell the inspectors those would not be good enough.

But, yeah, there's a judgment call, and the records that are provided don't have to be contemporaneous. They can supplement it with additional information like I said, like go in

there. They know where the test header was, but they just don't have elevations considered. For one in Florida, we may not worry about it.

In Delaware, we may not worry about it, but in mountainous areas, we would want the operator to go back and just retrofit those old hydro tests and make sure they considered elevation changes, so I hope that helps.

MR. DRAKE: I appreciate that, and I know that the devil's in the details so to speak.

MR. HOIDAL: Yeah, it is.

MR. DRAKE: There's a lot of gray in there we're trying to work with and that's really my recommendation. I appreciate the challenge that you have, but the committee did wrestle with this at great length.

(Laughter.)

MR. DRAKE: For many, many days, we wrestled with this in committee about how to create a practicable rulemaking and guidance here, and I would encourage you, in those areas of uncertainty, try to go back to the transcripts

because we really tried to be articulate about how to communicate that gray space, so, thanks, Chris.

MR. HOIDAL: I do want to point out one thing, where we are really sticking to our guns. You know there was a petition to the gas rule July of last year that was responded and there was a modification to the regs saying that if the pipeline is not grandfathered, it's a modern pipeline, the only TVC record they need to have is a valid Subpart J hydro test.

So, let's say it's 1985, okay? If they don't have a valid Subpart J hydro test according to 517, we say that they're out of compliance. So, that is -- we're more strict with the requirements of 517 after 1970, and then it is a judgment call prior to 1970, okay.

CHAIR BURMAN: Before we go to the next person, Andy, did you have any follow-up question or comment?

MR. DRAKE: No, I appreciate Chris' take on that. I just think that it is a very

pragmatic issue and a very practical issue. 1 2 We're going to have to work through it and I think not everybody is going to have all of those 3 4 records, and so how do we land in a reasonable 5 So, that's -place? It's a tough challenge. 6 MR. HOIDAL: 7 MR. DRAKE: Thanks, Chris. 8 Okay, I don't see any CHAIR BURMAN: 9 other comments from the GPAC or LPAC. Before I go to those in attendance who aren't on the 10 11 committees, just making sure there isn't anyone 12 else in GPAC or LPAC? 13 Okay, with that, I'm going to go to 14 Brandi Wolfe. Please state your name and the organization you're with if you're with an 15 16 organization. Thank you. 17 MS. WOLFE: Hi, my name is Brandi 18 Wolfe. I'm with a company called WSB and my 19 question is for Chris, and I wanted to ask a 20 question specifically to your slide about 21 overarching pilot results.

I think it was somewhere around slide

number 22. Can you elaborate on the last item which was regarding determining which components are applicable under material testing?

And I'm asking because recently there have been some questions about what we would call an auxiliary component such as a bolt or a gasket, and the expected NTR for those items is they're to be included.

CHAIR BURMAN: And I think you might be still muted if you're responding.

MR. HOIDAL: Yeah, Brandi, so what you're talking about is 192-607-F, and what components are applicable under 192-607-F.

So, when we did the pilots, even though they all had the same regulation, they were looking at anything greater than two inches, or anything with an X42 pipe material, or anything that couldn't be isolated from the main line, they all had a different approach of what they considered to be applicable per that regulation.

So, what we did is we got all of the

1 input. We got input from our team and we created 2 a series of applicability slides. Those are attached to the back end of the inspection forms, 3 4 and we actually defined these things are 5 definitely in no matter what. These things are always going to be applicable under 192-607-F. 6 7 A lot of companies went further. For 8 example, let's say you have a blow down stack 9 around a main line valve. Some of the people, they only took it to the first isolation off the 10 11 main line, isolation valve off the main line. 12 Other people took it on a crossover, 13 but what we're saying as a regulator, we took it to the first isolation valve off of the main 14 15 line. 16 Okay, now you're talking about 17 ancillary or pertinence. If it can be isolated 18 from the main line, then anything downstream of 19 that does not have to be tested. Does that help, Brandi? 20

Okay.

MS. WOLFE: Yes and no.

MR. HOIDAL:

21

1	MS. WOLFE: I think specifically the
2	question was regarding bolts. You know,
3	technically those cannot be isolated, but they
4	may not have an NTR that includes all mechanical
5	and chemical properties. They may just state
6	that they meet a certain industry standard, so
7	MR. HOIDAL: Okay, as far as bolts,
8	you know, things that can't be isolated were
9	considered the thing that interests us most is
10	the rating. We're not interested in the chemical
11	properties. We're just interested in the
12	ratings.
13	MS. WOLFE: Okay, that helps. Thanks,
14	Chris.
15	MR. HOIDAL: Sure.
16	PARTICIPANT: You're on mute, Diane.
17	CHAIR BURMAN: Thank you, sorry. So,
18	before we get to Section 114 questions or
19	comments, I don't see any more questions on the
20	gas transmission or hazardous liquid rules. Just
21	raise your hand if you still do.
22	Not seeing that, now we're going to go

to any questions folks may have specifically to the presentations as it relates to Section 114.

I see Ronald Bradley.

Again, just a reminder, state your name again, organization, and which committee you sit on. Thank you.

MR. BRADLEY: Thank you. Ron Bradley with PECO on the GPAC, and my question or my comment is more to Byron. Hello, Byron.

MR. COY: Good afternoon.

MR. BRADLEY: So, I appreciate how you laid out Section 114 and I agree. I'll sort of go in reverse of those three priorities. The efforts must not erode safety. I think that's awesome. Pipeline safety is like top priority.

And I'm sort of repeating a little bit of what I said earlier, tagging onto the chat from earlier around readjusting our lens to make sure we adjust for minimizing releases of natural gas and protection of the environment. I think that is very important. I think that underscores the need for research and development on

technology.

I also want to comment that, you know, some of this stuff, it's going to be a progression, and we do have certain pieces of equipment that are designed, if they work effectively, that they will release gas to the atmosphere to protect the solution, right?

You could have certain situations that are out there, and I think you're going to understand this, where we have leaks or we have gas in an area where we need to vent. That's one.

We could have distribution stations along many distribution systems where we don't have worker monitor kind of regulators where they have relief valves that release pressure to the environment if there's a buildup of bad pressure on the distribution system.

So, there are some aspects of our business that we're going to have to figure out over time. I think in the meantime, the approach to modify our plans as called for and then expect

the inspections in 2022, I think it's going to be great.

I think as long as we -- you know, understand we're trying to get there, and whether it's the distribution system or the LNG site, there's work that we have to do because some of our equipment is designed to release natural gas into the atmosphere.

I do think that there are some capabilities moving forward, and once again, the technology will help us get there.

The last thing I want to mention is this is one that I have trouble figuring out.

Right now, there are factors where we measure greenhouse gas for greenhouse gas reporting where we use basically a factor based on pipe material.

When we do some of this work to eliminate or reduce releases, we're going to have to figure out how to also capture that in a way that it can help us figure out if we're getting better or not.

Because the way we're doing it now by

retiring outmoded main like cast iron, bare steel, wrought iron and ductile is basically putting in plastic or cathodically protected coated steel and getting a really low factor, but then when we change practices to collect gas instead of blow it down, we're not going to be able to take that off of our measure.

So, it sort of creates a little bit of a dilemma. We're going to do the right thing, but it would be great to understand where we're getting better. Do you have any comments on that or is it at least something to think about in 2022 when we get closer to the rule?

MR. COY: Yeah, we gained a lot of the information through the pilot inspections we performed and we intentionally put in our plans for early November to figure out exactly what our inspection questions need to be and what our objectives ought to be as a result of that, so your comments are timely.

CHAIR BURMAN: And I do see Alan

Mayberry has his hand raised, so Alan, if you'd

like to share?

MR. MAYBERRY: Yes, thanks, Madam Chair, Alan Mayberry. Ron, I appreciate your comments and I agree it will be an iterative process.

You know, for those of you who are familiar with our PIPES Act of 2020, you know, you need to be very familiar with Section 113 and 114, the topic here today, because they are interrelated.

You know, 114 does cover leaks, but also it does what we can do now related to operational releases, and therefore, you know, Congress put a self-executing requirement there and we'll inspect against what operators have done to update their O&M plans, but a lot of moving parts on 114.

Now, ultimately there will be a GAO audit of what we do, and then ultimately, I expect there will be a report that could very well recommend further actions that are taken based on the learnings of what we've done in

Section 114. 1 2 So, it will be an iterative process, but it is quite a -- you know, between 113 and 3 4 114, it's very comprehensive. 5 MR. BRADLEY: Thanks. Good seeing you, by the 6 MR. MAYBERRY: 7 way. 8 Great, thank you so CHAIR BURMAN: 9 much. And I do see now we have Rich and Alan, Rich, do you want to ask your question? 10 yeah. And Alan, your hand is still raised. 11 12 MR. WORSINGER: I do. Thank you, 13 Diane. Good afternoon, everybody. I have a 14 comment and a question, first a comment to Alan. Alan, I know your staff has had a lot 15 16 to work on and I appreciate that you're still 17 working from home, but just the comment is 18 getting the slides to us ahead of time really 19 helps. 20 I've been scrambling here trying to 21 take notes as I'm looking at slides and keep up

with everything, and it's a challenge.

My question, on slide number five, I think I got that right, I jotted down inspect to determine adequacy of operators' programs. So, my question is what programs are you referring to?

It's my understanding, and I could be wrong, but it's my understanding that the scope of the congressional mandate is specific to operators' inspection and maintenance for O&M plans, and will PHMSA and the states' inspections be limited to inspections of O&M plans or will it expand beyond Congress' scope?

MR. COY: This is Byron. Our objective for this first round of inspections is to look at the plans and procedures operators may already have in place for natural gas management and releases, for things that they, plans they are preparing for that would be implemented, you know, shortly after.

We're not inspecting for rollout of programs. We're looking to see that the plans have been put in play to prepare for execution

going forward, you know, for natural gas 1 2 reduction. Chris, do you have any 3 CHAIR BURMAN: 4 comments before we move onto the next person? MR. HOIDAL: No, Diane, I think that 5 clarifies it. 6 Thank you. 7 CHAIR BURMAN: Okay, great, and you 8 can put your hand down. Great, thank you. Andy 9 Drake, you're up again. Reminder to start with 10 who you are and your organization. 11 Thank you, Chairman MR. DRAKE: 12 This is Andy Drake with Enbridge and the 13 Gas Pipeline Advisory Committee. 14 I have maybe just kind of an observation. Obviously, I want to make it clear 15 16 industry is committed to operating pipelines 17 safety and reducing planned and unplanned 18 releases of methane. 19 Many of us have goals to reduce emissions and have timelines with specific 20 21 targets that we come out publicly with and

They're far reaching.

they're broad.

beyond the pipelines. They go to every piece of equipment in this business in general.

I'm a little bit kind of confused with how you see 114 being implemented without having a clear 113 in front of it. I think the intent of Congress was to try to meet the requirements.

114 was going to have to meet the requirements of leak detection and repair as defined under 113.

So, if we get 114 out ahead of 113, I don't know if we're going to have the clear targets and scope that we need to try to ensure some sort of continuity in how the industry is going to go after this. This is a huge effort without a very clear target.

I think the things that caught my attention, Byron, when you were going through this was so many of the sources of release are outside our O&M plans.

They're things like dry gas fields.

They're things like gas-fired starters on

turbines. You know, they're rod packings on

recip engines. They don't have anything to do

with pipeline safety. 1 2 They're managed in other, by EPA frankly, with reports we have to them, but 3 4 they're not connected to our O&M plan and I'm 5 trying to --I think that may be a derivative of 6 the question that Rich was asking is when we talk 7 8 about our O&M plan, is it pertaining to issues 9 that are related to PHMSA and PHMSA's charge with regard to pipeline safety? 10 11 Are we not expanding PHMSA's charge to 12 go beyond pipeline safety and start looking at 13 pieces of equipment, you know, and turbines, and 14 things like that? It seems very unclear to me, very ambiguous at this point. 15 Thank you for the 16 CHAIR BURMAN: 17 questions. Does anyone from PHMSA have a comment 18 to the question? 19 MR. COY: I could --20 (Simultaneous speaking.) 21 MR. COY: Go ahead, Alan. 22 MR. MAYBERRY: No, go ahead, Byron.

You start and then I'll finish up.

MR. COY: We were looking to address natural gas releases from operations, maintenance practices, and certain emergency response activities, so we're looking for gas in those realms.

So, they may not be currently in our OM&E manuals, but we're looking for opportunities for reductions in those areas, so plans and procedures in that regard, you know, as you mentioned, many of which are already enforced.

We saw a lot of that across our pilots, but the programs you have in place may not necessarily find their way into the OM&E procedures. There might be, you know, that it appears in some sort of environmental management regimen instead.

MR. MAYBERRY: Yeah, I was just going to add that Congress clearly -- you know, one thing we were talking about at the start of this, you know, clearly expanded our authority related to, you know, adding protecting the environment

to our mission.

And, you know, to that end, you know, reducing methane emissions through operational releases will be an area that, you know, we will ultimately address in rulemaking at some point, but, you know, to keep things moving, Congress provided a self-executing provision that gives direction, you know, for operators to update their O&M standard, and that's what we would inspect against.

But like Ron was saying earlier though too, this will be an iterative process. You know, we have a long history of, you know, a very deliberative approach to rulemaking, to guidance and the like, and we don't --

You know, we can't regulate from a standard that's not there, but nonetheless, you know, one foundation of our inspections is reviewing O&M plans and what operators put into them.

And one of the challenges, you know, as we work through the pilot inspections, and

we're not done, is just, you know, what is that standard? What is a robust plan?

We expect that a plan that says reduce greenhouse gas emissions, period, is not acceptable, but there needs to be some meat on the bones that is meaningful and addresses releases that are operational and also addresses the leaks as well because it does cover leakage, but, you know, that's based on what we know today, but I believe this will be an iterative process.

We've communicated with the industry and we'll continue to do that with all of the stakeholders as we go forward to get this right, and we certainly won't go beyond our authority, but we will do what we can do, you know, and that's really what Congress is asking us to do, so I hope that helps.

CHAIR BURMAN: Andy, before we go to the next person, do you want to comment on that?

MR. DRAKE: Just a point of maybe clarification, we're not really challenging

congressional direction to you about expanding your authority. I think there is some authority there. I think the question really is about ambiguity. How expanded is it?

I mean, if we're going to get into turbine replacements because PHMSA says we should lower our dry gas seal releases, that's a very different direction than anywhere we've ever been with PHMSA before. If we're going to talk about getting into methane tracking on blowdowns, that seems related, and it's just where is that?

And I think really, Alan, my
recommendation here would be because this is such
a huge effort and we kind of got two parallel
events happening, 113 and 114 at the same time, I
think it's really incumbent on us to pump the
brakes a little bit here as we get done with some
of this net that's been cast to gather
information that Byron referred to and help
people clarify the target.

What is it that we're talking about?

Are we talking about turbines? Are we talking

about releases from pneumatic actuators? Are we talking about leaks from tubing? Are we talking about leaks from pipelines?

Are we talking about vented gas from post-combustion out of a compressor? What exactly are we talking about and what is the standard of care? You know, I heard Deputy Administrator Brown working together to not just reduce, but minimize.

Okay, like I said, the industry is in this. We're trying to get to set targets that we have. What is it that PHMSA interprets that to mean?

Because I think the rule or the advisory bulletin was so ambiguous, I think we have a host of different interpretations of what that means, and that's going to be a challenge for PHMSA to apply and it's going to be very frustrating for operators to try to hit.

So, I guess that's really my hope here is that we can at least be intentional to create a place where we get resynchronized tonight

because it's not clear is really my point.

MR. MAYBERRY: Right. And I can appreciate that. You notice we worked to land on the sweet spot here of our oversight program and your understanding of the expectations there.

so, you know, I think what we are prepared to do as we go forward is obviously stay in communication with all of the stakeholders and perhaps, you know, as we get closer to the end of the year, you know, at a good point in time have some sort of discussion, a public discussion, to, you know, kind of wrap-up, be a wrap-up to our pilot inspections. And it would be more of a -- give a better idea of where we're headed, you know, in the coming years as we start the inspections. So that's something that I think we're prepared to work toward. So, Andy, I appreciate your concern.

MR. DRAKE: Thanks, Al.

CHAIR BURMAN: Okay. Oh, Andy, if you can put down your hand that would be great. We do have two members of the Committee. We're

going to go to Chad first and then Ronald.

I do also want to recognize that I'm aware that we have at least one -- Erin Murphy, I see your hand up. We'll get to you after we go through the Committee first.

If there are any other Committee members, we're going to go to them before we get to the non-Committee members. So why don't we start with Chad. Again, remember everyone, say your name, your organization and which Committee you sit on for the record. Thank you. Chad?

MR. ZAMARIN: Thank you. Chad Zamarin with Williams, and I'm with the Gas Pipeline Advisory Committee. And maybe just carrying on that conversation a little bit, just a few thoughts, maybe a question.

I do think, you know, we need to be careful as companies, as an industry, we're mobilized -- there's a massive mobilization going on from a greenhouse gas emissions perspective.

You know, we're -- and I do think

PHMSA has a role to play in that. But I would

just be careful that we don't get at conflict with other areas of effort and potentially not put the emphasis where the value is going to be at.

You know, kind of to what we spoke about earlier, there are some specific areas where I think PHMSA can enhance the journey towards emissions reduction. But, you know, we've got massive sustainability efforts underway, ESG efforts underway. We have ETA programs that we're working through.

We've all, you know, I mentioned earlier on the interstate side of the business, we've committed as an industry to a net zero ambition. And I can cut at 90 percent of the, you know, opportunity in our perspective would fall outside of what would be an O&M kind of manual type of effort.

And so I do think PHMSA is clearly defining its role. I think it would be beneficial for both, you know, us that are operators and PHMSA as a regulator because there

are -- PHMSA is in a very complex landscape right now. And if we don't get it right, there are going to be conflicting, I think, efforts. And we might not be putting the effort in the area where the need is greatest.

And so I would just ask if there is an opportunity to clearly define -- you know, Alan, you mentioned that there has been additional jurisdictional authority afforded to PHMSA. But I think defining -- can we define what that is? And can we also try to target that towards where we think the benefit will be significant? Because if all we do is go through the O&M Manual, and we try to pepper, you know, everywhere we can with some emissions reduction language, I'm not sure that it recognizes the right strategy for, you know, driving toward the goal.

And that's what we've really been focused is let's set clear targets and goals as companies, as an industry and then each of us have to individually go out and figure out where

we get the results.

If we try to do kind of a one size

fits all and pepper it through a safety

regulation, I just worry that we're going to take

away from the effort that we're already

committing to under different, you know,

jurisdictional structures, whether that's ESG and

our investors driving us, EPA and their rules and

regulations or other kind of net zero programs

that are being put in place.

So I just wonder is there an opportunity to continue to clarify the role that PHMSA plays and how you interpret that jurisdiction and what's the goal that we're trying to accomplish?

MR. MAYBERRY: Yes. Thanks, Chad, for that. A couple of things, first off, you know, the process we're going through now with our pilots and having discussions with you and with other stakeholders is really helping us hone what our approach will be.

But, you know, we're not going to

overstep our authority. I mean, that's just a -our attorneys wouldn't allow us to do that. And
we're not going to -- you know, we are going to
practice good government. And EPA has their
role, and certainly, they're a big part of this.
And they will continue to be. But, you know, I
think as we move forward as we round out our
pilot inspections and conclude those, you know,
you'll have a good idea of where we're headed on
this.

I don't think you need to be too concerned that we're going to overstep our authority and then, too, I think you'll understand, you know, where we're going to be heading in the next year.

But the other thing I just wanted to reinforce, this isn't a one and done deal. This is going to be a journey because, you know, Section 114, right out of the box we're doing what we can do. But, you know, there's more to learn. This will be a learning experience for us as well as far as learning what practices you are

doing.

know, what do operator -- you know, how is the practice of reducing blowdowns to the atmosphere, you know, and diverting it to a low pressure pipeline? I would expect that that's a practice that would be used. Is that the only practice?

No. Probably not. And there are probably areas -- in fact, I'm sure there are areas where you can't do that.

But I think this work will guide us.

It will also help inform the report that's

expected by 114 that we'll see where we need to

go. And I think that will add further clarity.

Again, it's a journey just like S&S. I hope that
helps.

CHAIR BURMAN: Chad, do you have any other comments or questions before we go to the next folks?

MR. ZAMARIN: Yes, thanks. Just a quick follow-on. It does help. You know, I think it's helpful for all of us to remember, you

know, the transition that we're going through is significant. And I think we've got clarity around the goal. But the path to getting there is still very much, you know, in the early innings of being defined.

So, you know, I think staying coordinated with all of the different stakeholders and being careful not to prescribe, you know, kind of the specifics of how we get to the goal when we're this early on in the process is something that we should keep in mind.

Because I think that's what we really try to encourage is let's get laser focused on what the goal should be. Let's be careful not to over define the way to get there because this whole industry is still -- you know, this kind of emissions reduction, net zero industry is just now getting kind of in its infancy. Thank you.

MR. MAYBERRY: Thanks.

CHAIR BURMAN: Great. Thank you so much. And, Chad, if you can put your hand down. We do have two more people who are on the

Committee, Ronald Bradley and then Bill from
Pipeline Safety. And then we do have two people
in the queue for the public, that's Erin Murphy
and David Murk. And I think other people have
started to raise their hands, too.

I'm going to go back now to Ronald and then Bill and then Rich, who is also on the Committee. Erin and David, I know that you've had your hand up for a while, but we do go first per protocol to the Committee and then to the public. So, Ronald?

MR. BRADLEY: Thanks, Chairman. Ron Bradley from PECO with the GPAC. So let me see if I can try a different approach here because I think I'm building off of what Byron said.

So I understand 113 and 114. I think 114 -- when I think about Section 114, you know, it brings to mind the work that the American Gas Association did on the white paper considerations for eliminating hazardous leaks and minimizing releases of natural gas.

And then, you know, so when I think

about 114, I think about, all right, it's a self-executed mandate. Congress, I believe, there the rulemaking is going to be extensive. So Byron help me here.

Is it more that, hey, look, I think this is what you said. Just build into your plans where you will start to show consideration for reducing natural gas leaks in your operation. Don't just operate your facility in a way that deals primarily with public safety and hazards to buildings, explosions, things like that.

enough consideration into it for releases of natural gas, you know, figure out where the technology is going, like some of the technology out there for collecting natural gas instead of just using nitrogen and pushing it out of the pipe to the atmosphere and let's try to collect that. Figure out where you have aspects of your routine program where you can, you know, change the way you do things, maybe limit the operation of certain pieces of equipment, and put that in a

plan, and we'll come look at it.

And then as this thing progresses further down, because in my mind I'm not thinking targets and things like that. Obviously, I think the wheel that you put up for distribution leaks such as 40 percent of the distribution of the data on gas distribution systems, 40 percent of that emissions was -- 46 percent was leaks. And I get that.

I think the accelerating retirement of main and services is going to reduce that continually. I'm not even trying to reduce the pie. I'm trying to reduce the circle, right? So dig in, bring that down, find a way to address meters although in many states gas is still growing. So as we put more meters in with the factors it might look like it's going up.

But the long and short is, it seems to me you want to see us moving in the right direction as an industry, and you want to come in and check our plants to see if we basically have done nothing in our plants from a different

perspective or for showing places in our plants, especially leveraging the AGA white paper on considerations for eliminating hazardous leaks and minimizing releases of natural gas.

That's the way I hear you, Byron. Am
I off point or am I close?

MR. COY: Well, first off, the AGA paper, I wish that would have been published six months ago. It would have made our job easier because a lot of things we're calling for, you know, are mentioned in that paper, which came out about the time we were ready to start into our pilots.

But, you know, a lot of the things we mentioned, you know, operators are already engaged in release management. But we have just never, you know, been asking about that previously. It's now brought more into the forefront for us to monitor and examine what programs are there.

As Andy mention, you know, operators are, you know, engaged in doing a lot of work

already in this area outside of the scope of our interest in previous inspection work. So we would like to see what they're doing.

We're not necessarily -- you know, you may not have to do something better than you're doing once we can identify what activities the operators gave them, we may find that what you're doing is admirable at the place you're currently running. We just don't know that just yet.

MR. BRADLEY: Thank you.

CHAIR BURMAN: Okay. Thank you so much. All right. So we're going to go to Bill and then Rich and then if there are no more questions from GPAC or LPAC members, we'll go to the public. And we'll start with Erin and David. Still, again, I would remind everyone your name, your organization and which committee you sit on. Thank you. Bill?

MR. CARAM: Thank you, Chair Burman.

My name is Bill Caram. I'm with the Pipeline

Safety Trust, and I sit on LPAC. I just want to

say I do appreciate the difficulties that the

ambiguity of Section 114 raises for the 1 2 operators. Just a reminder that, you know, we are in a climate crisis, and Congress did issue 3 this mandate that's now law. 4 5 We clearly see this to be within 6 PHMSA's authority. And I'll just say from a 7 public perspective, I think what we're expecting 8 to see is a good safe effort that operators 9 update these O&M plans to the best of their ability to start cutting methane emissions as 10 11 soon as possible without waiting for promulgated 12 rules. That can take some time. So that's it. 13 Thank you. 14 CHAIR BURMAN: Thank you, Bill. You can put your hand down. 15 That would be great. 16 Does anyone have a -- do you have a comment to 17 Bill? Okay. Hearing none, we'll go to Rich.

MR. WORSINGER: Hi. Rich Worsinger,
Wilson Energy on the Gas Pipeline Advisory
Committee.

And just a follow-up comment to Alan.

I think a public meeting about PHMSA's

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expectation would be very, very helpful. It would help alleviate some of these questions, concerns that you are hearing us, clarity about which portions of the inspections are for enforcement versus which ones are informative.

And, Alan, you know, you've dealt with this for years. You know, we want to get this right. None of us want to be spending our time and efforts on the wrong area. And I also recognize this is a new initiative, and we're all learning as we go. So, again, I think that meeting would be very helpful.

MR. MAYBERRY: Thanks, Rich. And, yes, I think as we navigate this communication is key. So I think, you know, that I think more than ever it will probably help in this case whether it is ambiguity that we keep seeing.

Thanks.

MR. WORSINGER: Great. Thank you.

CHAIR BURMAN: Great. And now we have another member from the Committee, back to Chad and then we'll go the public unless there's some

other member. Thank you.

MR. ZAMARIN: Thank you, Chairman.

Chad Zamarin with Williams, GPAC. I just wanted to respond, a follow-up to Bill Caram's comment that I totally agree with his comment. And at least for my part, from an industry perspective, we're not waiting on PHMSA regulations.

And my point is that this issue has become an issue where our social license to operate is what's going to drive us to take on this challenge. I mean, our industry are taking on the challenge of the need for energy to be delivered to our customers but also the need for emissions to be reduced.

I mean, we clearly heard that as a messaging. So my comments were to be careful that we don't try to regulate that from PHMSA's perspective which I'm not sure has the bandwidth nor the expertise to drive the greatest reductions in emissions across our system.

So I think you've got to play your part. You've got to know your role. But I

totally agree with what Bill Caram said. And I would just say for my part, I've seen the industry get it. There's no one that's going to think that a PHMSA regulation is what's going to help us, you know, get to our net zero goals.

And so that's why, you know, I just want to make sure we try to make sure everybody is getting their kind of capabilities and jurisdictional authority in the right role so we all get the maximum result possible.

CHAIR BURMAN: Thanks. Alan, do you have a comment to that?

MR. MAYBERRY: Yes. Just a follow-up.

Thanks. I love it when our public and operator

stakeholders are on the same page related to, you

know, what we're after. So thanks for that, and

I look forward to working with all of you as we

move forward.

CHAIR BURMAN: Great. Thank you,

Alan. You can put down your hand. Seeing no
other comments or questions from the GPAC or LPAC
members, I'm going to move now to the public. I

want to thank Erin and David for your waiting to talk. So, Erin, I will go with you again. Your name and the organization that you are representing. Thank you.

MS. MURPHY: Thanks, Commissioner
Burman. This is Erin Murphy. I'm with the
Environmental Defense Fund. Thank you, Byron,
for that helpful presentation. It's really
valuable to pick up some insight into how PHMSA
is approaching the Section 114 implementation and
great to see that the Agency is, you know,
preparing and on track to start the inspections
in 2022.

I wanted to ask a couple of questions.

To start, it would be helpful to hear more from

the Agency about how PHMSA is planning to ensure

transparency around the Section 114 mandate.

So, Byron, you described the inspection criteria that are being finalized. It would be helpful to hear if the inspection questions are going to be made public so the public can understand, you know, what is being

expected of pipeline operators to comply with this element of the PIPES Act of 2020.

Another question that came to mind along the same vein for me was, you know, there's going to be these inspections ongoing throughout 2022. And then as Section 114 requires, there will eventually be a GAO report that my understanding is that's expected to be completed by the end of 2023.

I mean, that's a ways out, right, from the time when the inspections are occurring. So I think EDF's hope would be that PHMSA might be thinking about ways to make this process more transparent. And I'm curious if PHMSA is thinking about ways to share, you know, outcomes from the inspections as they're happening throughout 2022 or what other sort of plans are in store for transparency. Thanks.

MR. COY: This is Byron. In answer to the first part of your question there, our traditional practice is that we'll establish the question criteria that we use. This question

will go into the public domain. So, you know, all interested stakeholders, you know, would be able to see the questions that we are going to be asking.

We have not released that as yet because we're just working on the development now. We'll be wrapping that up, you know, by the end of November.

I heard some interest in more information by the public about our expectations.

And Alan may have comments about how to arrange to make that happen.

We periodically would give presentations about progress in certain initiatives. We've in the past provided statistics of composite information about the other types of inspections we've performed. And there's no reason why we couldn't do the same for 114.

MR. MAYBERRY: And just to follow-up on that. Byron covered it well. But as it rolls into our inspection process, you know, the

results of inspections roll into our enforcement transparency database and a complete set of metrics is available today.

I would fully expect, Erin, that, you know, as we learn from, you know, our implementation of Section 114 of the inspections that considering the audit by GAO and then also, you know, the expectations on us to report on this will also include a level, you know, of details on the results of our inspections.

I can't predispose that, but I would expect that it would be included there. But at a minimum, that would be on our website for, you know, where we -- all the parts to our work for all information related to inspections and enforcement. Thanks.

CHAIR BURMAN: Erin, do you have a comment or follow-up to what you heard before we got to the next speaker?

MS. MURPHY: Yes. Thank you so much.

That was helpful and, you know, we'll be

interested to sort of follow along and track that

information as it comes forth. So thank you for clarifying that.

I have one additional question, which
I just wanted to talk a little bit and understand
how PHMSA is thinking about understanding
greenhouse gas emissions from gathering pipelines
in particular.

Byron, I saw in your presentation, you know, you were sharing some information that was,
I believe, derived from EPA data to track the
emissions from both transmission and distribution
lines.

I didn't see a sort of parallel assessment of emissions from gathering lines. I know EDF has pretty significant concerns about the methane leakage that is happening from gathering lines around the country, and I just wondered if you could speak more to that.

MR. COY: Yes. Jurisdictional gas
gathering lines are a part of the asset group
that would come under the inspection process.
That is one of the assets that are set to go into

the string of assets on the slide deck. 1 2 MS. MURPHY: Sorry. Just to follow-up and clarify there. So you're confirming that 3 4 gathering lines are subject to 114? I just 5 wanted to understand what you were -- go ahead. Well, the jurisdictional gas 6 MR. COY: 7 gathering lines would be included. Those that 8 are not jurisdictional would not be included at 9 this time. Right. Understood. 10 MS. MURPHY: And so are you, you know, similarly looking at 11 12 greenhouse gas emissions reporting data from EPA to think about what those emissions look like or 13 14 just how are you approaching that consideration? MR. COY: We use the EPA data from all 15 16 workers, from different types of pipelines to 17 establish the question sets. And some of that 18 data influences the question set we would be 19 using for gas gathering. 20 MS. MURPHY: Okay. Thank you. 21 CHAIR BURMAN: All right. Are you 22 good, Erin, before we move on to the next person?

1 MS. MURPHY: Yes. Thank you, 2 Commissioner. 3 CHAIR BURMAN: Great. And thank you 4 again for your patience, Erin. MR. COY: Excuse me. I quess I should 5 have said regulated gas gathering was the 6 7 jurisdictional. 8 MS. MURPHY: Understood. Thanks. 9 CHAIR BURMAN: Okay. Thank you. You 10 can put your hand down, Erin. Now we have David. 11 MR. MURK: Yes, thanks Chairman. 12 I had a question actually going back to Byron's 13 presentation and really more on the liquid side 14 actually. So clearly the intent of Section 114 15 16 is focused on natural gas and methane emissions. 17 But, you know, based on how the language is 18 written clearly, how these liquid operators have 19 been pulled into it. So I just wanted to make 20 sure it was clear because I still do get asked by 21 operators on the intent and what is actually 22 required for having these liquid pipeline

operators.

And it's my understanding, Byron and Alan, that the intent with how there's liquid pipeline operators, as Byron said, is that essentially they would get asked during an inspection whether they had natural gas operations in some way as operators, whether that's an accessory or, you know, what that might be, auxiliary equipment, et cetera.

So I just wanted to make sure I'm clear on that. You know, what is expected? What is that going to look like for a hazardous liquid operator? And I'm assuming as part of the inspections in 2022, you're going to have to go to each liquid operator as well. So any clarity on that would be helpful. Thanks. Thanks, Chairman.

MR. COY: This is Byron again. Dave, you are correct. The natural gas emission aspects of 114 would be applicable to hazardous liquid operators if they use natural gas, fuel gas or instruments or actuator control.

So the few operators that have natural gas in their operation, we will be establishing questions based on the natural gas aspect. The fact that they use natural gas doesn't expand our interest into hazardous liquid transmission. It would only be focused on how natural gas is being used and managed and released.

The leak-prone pipe part of 114 is applicable to all operators. It does not have a natural gas affiliation. So there would be a few questions that would be posed to liquid operators about leak-prone pipe, you know, prep beyond the category of the example pipes that are shown in the language.

CHAIR BURMAN: David from API, did you have any follow-up questions before we continue?

MR. MURK: No, I don't think so. I think, you know, just a better understanding, you know, what is -- and, again, it's been part of the discussion around the gas side and how far and to what extent this is going to go and their interpretation of that provision and what leak-

prone pipes would mean.

I mean, as part of an integrity
program, there's already those requirements,
right? So I guess it's just understanding a
little bit more on that. And this might not be
the forum for that. It might be a separate
discussion. But, yes, that's all I had. Thanks.

CHAIR BURMAN: Okay. Thank you. Does anybody have any follow-ups to what we've heard so far before we continue? Okay. Hearing none and seeing none, I just want to kind of level set for a little bit.

We did in this agenda item, which we moved from Agenda Item 9 right to right after our break so it became Agenda Item 6 for those who may have missed that.

We looked at the gas transmission integrity management rule as well as the hazard liquid integrity management rule, which laid out regulations specified how pipeline operators must identify, prioritize, assess, evaluate, repair and validate the integrity of these gas

transmission pipelines or the hazardous liquid pipeline that could in the event of a leak or failure affect high consequence areas within the United States.

We also looked at Section 114, which we're looking at the statutory mandate to update inspection and maintenance plans to address eliminating hazardous leaks and minimizing releases of natural gas in pipeline facilities and looking at the fact that operators must revise their plan to address this.

I do just point out that we heard a lot of, you know, conversation on what does this look like from an implementation perspective and an execution perspective?

Both the PIPES Act Section 113 and 114 as folks know are self-executing, meaning that PHMSA does not need to promulgate regulations in order for operators to meet to take action such as revising or making their procedures. That is looking at to be done by the end of 2021. And then all states must review all operator

procedures by the end of 2022 and then we also are looking at the GAO report for 2023.

So there's a lot of discussion on, you know, the devil is in the details with the execution and implementation.

Some things that I heard is the need for engagement and addressing the natural emerging challenges and questions that arise from the new statutory obligations with the environmental now more expressly in the statute the need to be focused on the environment.

And what I also am hearing with that is making sure that there are clear jurisdictional guardrails and working through those challenges that are similar to how the states are looking at their clean energy transition issues as well.

And within the framework of PHMSA,

PHMSA is, you know, Alan had spoken a little bit

about the real importance of working within their

statutory authority and ensuring their efforts on

pipeline safety are done but recognizing that the

new statutory obligations that come in have to be looked at in light of the whole with their jurisdictional issues.

There's a lot of discussion, and I
think there's a lot of follow-up that will
happen. And Erin Murphy from EDF, you know,
raised a good point in terms of looking at how
you're doing that from a transparency perspective
and some of the questions that arise from that.

I'm sure these are going to be important conversations to continue in a collaborative fashion.

I do just want to point out going back to Acting Administrator Brown kind of three points that he has been speaking about lately, which is the need for continuing and enhancing our cooperative relationship as well as navigating emerging challenges and then the importance of communicating our work and then looking at it from new statutory obligations.

And I did say Section 113 and 114 are both self-executing. That was a mistake. It's

1	really only Section 114 that's self-executing.
2	Section 113, though, is an important component of
3	that.
4	With that, before we go on to the next
5	agenda item, does anyone have any other comments
6	or questions that are important for us to
7	address? Great.
8	Seeing no hands, we are now on Agenda
9	Item the new Agenda Item 7. We have three
10	agenda items to get through, and we're going to
11	turn now to David Lehman to discuss the 2020
12	PIPES Act briefing. Thank you.
13	MR. LEHMAN: Thank you. First, I'd
14	like to do a sound check.
15	CHAIR BURMAN: You sound great.
16	MR. LEHMAN: Okay. Great. Thank you.
17	I've had some technology challenges earlier
18	today. And you should soon be seeing my slide
19	deck.
20	CHAIR BURMAN: And we can see it now.
21	MR. LEHMAN: Okay. Very good. Well,
22	first of all, thank you very much, Madam Chair,

for that kind introduction. I'm Dave Lehman.

I'm the Director of Program Development within
the Office of Pipeline Safety.

I've been in this position for approximately 10 months and came to this position in December of 2020. And when I returned from the holidays, I found that the PIPES Act had passed and that I would be asked to be tracking a lot of what we're doing.

So what I'm going to be talking about here is the PIPES Act of 2020. It was signed on December 27, 2020, at approximately 10:00 p.m. on December 27. And what it does is reauthorize the Pipeline Safety Program through fiscal year 2023.

It includes 38 mandates advancing pipeline safety, environmental protection, technology innovation, effective government and then, of course, some workforce development.

My slides have been really kind of focused around those areas, pipeline safety, environmental, technology, innovation, effective government. I'm not going to touch on the

workforce development in this presentation
because those are really kind of mandating, you
know, how many staff we have and the like. I
believe that has been covered elsewhere.

I wanted to point out, you know, 38 mandates. As we run down them, 16 of them affect rulemaking, 7 require new rulemakings, 7 advance or modify existing rules and then 2 may need modified procedures. But we're still evaluating those, and in some cases, you know, we're coming to some conclusions on that.

Eleven mandates require study reports and reviews. Some of those have already been completed. Six are self-executing as you had mentioned, Madam Chair, but they affect those operators, PHMSA and our state partners. We had two hiring mandates and then GAO was mandated to do these studies.

So for comparison just how did this look, you know, compared to the 2011 and 2016

Acts? There were 42 mandates in the 2011 Act,

and 40 of those mandates have been completed thus

far. And as you will see in the PIPES Act, some of those are advancing, in the 2020 advancing those 2011 mandates.

And then in 2016, we had 16 mandates and 17 of those have been completed. And once again, those that had not been completed have typically rolled over into the 2020 mandates.

So starting into the enhancing pipeline safety, there is no real organization to this or priorities here I'm just doing them by sections for each of these like safety, environmental, et cetera. So please don't read any prioritization into this.

I've also made some highlights here as you'll see color coding as to what's required of the mandate within them. So regulations are red, and you'll see colors for green and blue for others.

So starting off, the first mandate is to issue regulations prescribing the applicability of the requirements to idle pipelines as you probably all are aware. There

is definition or there is no status on the idle pipeline.

We have put up an advisory board in the past on those. But as we know that sometimes pipelines are not in use, but they plan to be used in the future. So those are still subject to the regulation although we do recognize that some regulations are not applicable to a pipeline that is not operational.

So what Congress has asked us to do here is to issue regulations prescribing those that are applicable to a pipeline. And so it really does create that third category of idle pipeline.

The deadline of that one, you'll see most things are either one year, two years, three months. And they give us, you know, standards so. That one I believe John might have touched on that earlier today, but we see that the deadlines give us prioritization. They help, you know, show us where Congress puts our priorities. But, again, we also look at the resources.

The LNG facilities is the next one that was in Section 110. And really it's to review and update 49 CFR Part 193 to include large scale liquefaction. We had an existing rule on that one, and this one would be modified to address the 110. That one had a due date of 2023, end of the year.

Gas gathering, and this one put a prioritization on issuance of a final rule in the gas gathering. As you can tell by the deadline, that was a high priority for Congress to us and John, in his presentation earlier today, highlighted where it is in our priorities.

Class location, that one basically addresses the use of these Advisory Committee procedures whether to advance the rulemaking on class locations, the existing rule. And that one really is to determine whether to have an Advisory Committee meeting. So I think that one is a relatively easier mandate to meet. And I know meetings are going to be scheduled here in the future.

The next one is integrity management for distribution pipelines. And really here, we are to conduct a study on integrity management methods to determine which could drive a greater level of safety for specimens of distribution systems.

So this is a study. And you'll note the color coding on green on that one so. That study is due in 2022, end of the year.

The next big section -- I lumped all the Leonel Rondon Pipeline Safety Act into this one thing, to this one column. You see the row in this table. It has some various timelines.

John spoke significantly on that rulemaking that is undergoing.

I'm going to talk a little bit more.

I have some separate presentation slides on that specific act since it was pretty extensive.

Just, you know, part of the act is in memory of Leonel Rondon who lost his life in Merrimack

Valley incident in Massachusetts. So I'll be covering a little bit more on that a little bit

later in this presentation.

The pipeline safety management systems or SMS, we are to submit a report on the number of distribution operators who have implemented SMS in accordance with API recommended practice 1173. And that is due in December of 2023.

Switching gears a little bit here, and the first two items on this one are ones that have been extensively discussed today with the leak detection and repair. John has covered the 113 at length this morning. And then we also talked a little bit at the 114. Notice the deadlines on those things where they really do highlight the priorities of Congress for us to be working on.

The 114, the phase mandate just to reiterate the timeline, so really the self-executing piece, there is one mandate in that, us to enforce in the following years and another mandate, I didn't color code that one, but the GAO, the study, what we and the state have done and make recommendations.

And also PHMSA is to conduct a study on the technology. So then based on all of that, the Secretary of Transportation is to consider de-regulation. So this ties back into that kind of duplicate, if you will, into 113 and followons to 113.

The other mandate, environmental benefit in Section 118 that PHMSA is to include environmental benefits in justifying the cost of regulation. And that was an immediate mandate.

And we have, in the past, and have continued to do so, included environmental benefits in our cost benefit analyses or our RIAs, regulatory impact analysis. So that was already part of our mantra. So that was a mandate that has already been fulfilled because we had been doing that.

Also PHMSA has to enter into an agreement with the National Academies of Science to study automatic and remote control shutoff valves. I believe they sent the cover back. We had the agreement in place with the National

Academy and that study has already begun.

Unusually sensitive areas, that expansive definition of U.S. aid for certain coastal waters and basically address the Secretary to complete regulations that were mandated under the PIPES Act of 2016. And once again you can see the timeline that Congress highlighted this as a priority for us.

And we are moving on that. And what was good about the legislation here is they gave us a good definition that we could use in the rulemaking process.

Hazardous liquid pipeline integrity assessments really just focuses on deep water hazardous liquid lines where an operator might assess the potential impacts by marine equipment and other vessels such as anchors. You might recall that, you know, there was an accurate strike in the Straits of Mackinac and also there was the more recent one off of California.

So that is also a self-executing mandate. And that assessment would be rolled

into our existing inspection enforcement programs. So that is a recurring assessing that the Board has these liquid pipeline operators that meet the definition of requiring the assessment.

Technology innovations, I believe there was a question earlier today about the testing program. And really this is allowing operators to look at and evaluate innovative technologies.

I just put some requirements in there, as Sentho had noted, such as this could not take place in an ACA right now, but it does require us to do a study on the applicability of whether this could be tested in ACA.

I know in my discussions Sentho and her engineers, there are certain things that we could look at that would not, you know, pose a risk in ACAs. Just some type of light monitoring or system like that, why would that -- you know, that would be beneficial for an ACA.

So that's ongoing, and I know Sentho's

group is working on that. They did not give us a deadline on that one although they did give them a time limit on the testing programs. And that was a five year program. So once a program is approved, it would be approved for five years.

And one other point on that one is anything that comes out of that program must be basically transparent. We must provide public notice of that and also post results of this on our website.

The next one, I think Alan and Sentho both touched on this, basically that we are required to submit our report to Congress on R&D capability to PHMSA and whether having an independent pipeline facility is critical to our operations. So that was touched on earlier. A due date for that is December of 2022.

The LNG, liquefied natural gas, center of excellence, PHMSA is required to report basically what resources would be necessary to establish such a center. So, you know, costs, human resources, et cetera. So all of that needs

to be detailed in a report and submitted to

Congress by December of 2022. And I believe that

one was also mentioned earlier this morning by

Sentho.

Effective oversight, effective government, the first mandate really was a self-executing one and really it expanded or added the definition of technical assistance, who are eligible for our technical assistance grants, or TAG grants, and also refines the eligibility for who can apply for those.

That was immediate and those criteria and that definition was used in this year's TAG grant award. So that's already been admitted as well.

Regulatory update status. We are required to publish on our website the status of each outstanding rulemaking mandate. So that's in the 2011, 2016 and 2020.

What really changed, we've had that requirement in the past. And in the past, it has been provided every 90 days. Now it's required

every 30 days. And Congress also said we still need to know where PHMSA is with the rulemaking. We want to know where the Office of the Secretary is as well as OMB. So Congress basically recognized that it does not have control over everything so therefore they want to know who has possession of a rulemaking and where it is.

So that happens every month. And I think John mentioned that website where it's available. At the end of this presentation, I will have a link to this rule. And you can also -- that has links to both the legislation as well as the status reports that are out there.

Enforcement proceedings, the only change there is that Congress allows respondents to enforcement proceedings to request consent agreements. So there is not a specified date for that one. We see that that is just changing our procedures.

There might be some follow-up rulemaking just to clean up some things in the future. But we see that is something we can do

now and have been working on it. So the specified is just, you know, how soon we can get that done?

So following up on that and it's also, you know, it's in the same section that has to do with our enforcement procedures. And really it's asking GAO to come in and take a look at the information that we have available on our website to make sure that we're transparent.

So, you know, if there's a consent agreement, do we have that posted out there? If an operator provided a response, you know, is that posted out there? So GAO is to come look at what we have available and then make a report to Congress and, of course, do recommendations along with that. And that report is due in October of 2022.

GAO, another GAO requirement is to review and analyze GAO spatial and technical data that is collected by operators on gathering lines. GAO has already started that. PHMSA has been involved with the interview process with

them. And we suspect that they will be wrapping up their report here shortly. And so we anticipate receiving that report probably, I expect, pretty close to the deadline.

Additional, 116 really expanded whistleblower protections. And really what this one did was allow whistleblowers, if they had, like a non-disclosure agreement with their company, that in order to whistleblow, that agreement is null and void or does not preclude them from whistleblowing. That one is self-executing and that took place immediately.

So drug and alcohol procedures is the next one. This one really is to look at our, you know, auditing program for drug and alcohol programs in Part 199. It's really to improve efficiencies.

What this one focuses on is the shareability of auditing. So the example I like to use if there's a pipeline operator that both is inspected by -- is both intra and interstate that a state could accept a PHMSA audit of the

program and vice versa at least for operations within the -- that it's joint jurisdictional. So really it's to improve the efficiency of the auditing of drug and alcohol regulations. And our staff is working on that right now.

Another self-executing provision is related to the Safety Related Condition Reports that requires operators to provide the Safety Related Condition Reports to the Secretary of State and Tribes within five days of those happening. And that was an immediate self-executing provision.

Our discussions within PHMSA is additional guidance needed there? Pipeline operators should know where the pipelines are operating. But, you know, is it a federally recognized Tribe or not? I think that's some of the areas where some additional guidance may be necessary.

I'm going to be changing gears here, going a little bit more into detail into the Leonel Rondon Pipeline Safety Act.

The first one really looks at distribution integrity management plans. So really once they issue regulations to ensure that PHMSA evaluates the risk from cast iron pipes remains a risk for low pressure systems.

So one thing I would, you know, encourage anyone if they have not read the NTSB report and some of the findings from the recommendations out of that, you will see a lot of common themes here with this part of the act.

I want to also add the certification process so the states have sufficient qualified inspectors, and we do have processes and procedures in place within our state programs that are being looked at upstate.

Emergency response plans, basically operators are required to have written procedures on how to communicate with first responders, public officials and the general public. That was one of the issues that came out of the Leonel Rondon, excuse me, the Merrimack Valley incident.

Operations and maintenance manuals,

basically to have procedures really how to respond to overpressurization and then also how do they manage change, the management of change?

Once again, if you go back to the Merrimack

Valley and what occurred there, one of the issues was management of change.

And then finally on this one is the pipeline SMS. This requires us to submit a report. I mentioned this earlier on the number of natural gas distribution operators that have implemented pipeline SMS in accordance with APIRP 1173.

This one, PHMSA will be working with our state partners on. NAPSR has a big role in this one. And so this one is due once again December 2023.

And safe pipeline safety practices,
you've heard the term, you know, traceable,
reliable and complete records. That applies in
the issued regulations for the distribution side.
It also requires qualified agents within a
distribution system to monitor gas pressure in

the district except if they have the capability of remotely monitoring that and for automatic shutoff and to assess and update appropriate regulatory stations to ensure the risk of overpressurization is minimized.

So I know John talked a good bit about this this morning, but that is all part of that in response to Leonel Rondon.

A little bit more on this safety
management system report that PHMSA is required
to -- this details some of the different
requirements that we must have. So how many have
implemented it? The progress operators have made
in implementing it and the feasibility of
implementing it.

Once again, this requires us to work very closely with our state partners because we will be getting most of the information really through our state partners on the implementation of SMS on distribution operators.

And then really it requires us to provide guidance and recommendations after we do

the study as part of the results we want. And then we and our state partners are to promote SMS amongst the distribution operators.

So as I promised, here's the link to the legislative mandates. If you go to this website, we will have the link to the rulemaking charts. It's updated every 30 days as well as an actual link to part of the Consolidated Appropriations Act. So our appropriations as well as the government's appropriations plus the Pipeline Safety Act is all on this one large document. That's why our act begins on Page 1029.

So that concludes my presentation, Madam Chair so.

CHAIR BURMAN: Thank you.

MR. LEHMAN: Yes.

CHAIR BURMAN: Thank you so much for that. It was really, really helpful. I'm going to see if anyone has any questions. I know that we're going to also have a briefing on SMS so some of the details on SMS that people may want

to save their questions or comments for that. I don't see any members of GPAC or LPAC with any comments or questions. Actually, Chuck?

MR. LESNIAK: Yes, thank you, Madam Chair. Chuck Lesniak with the liquids group representing the public.

Just a quick question on the rule for deep water lines about anchors, anchor chains, that sort of thing. I didn't catch the date on that. Was that already in effect at the time of the recent spill in California? And if it wasn't, is there any thoughts on is that the kind of incident that's trying to avoid?

MR. LEHMAN: It was a self-executing mandate. And the pipeline operators had one year to do the assessment, so the one-year timeframe would be December of this year. So, you know, I need to go back and look at the Act, but I believe it would apply to that situation although the operator in that case would have still had a few more months to conduct that assessment.

MR. LESNIAK: Okay. This may not be

something you can comment on. But does anybody 1 2 know whether with PHMSA, does anybody know whether that operator was in compliance with the 3 4 rule, and it had already implemented it? 5 MR. LEHMAN: I'll defer to -- I am not 6 aware of that. I have kind of tracked that 7 incident, but it is still in the investigatory 8 phase. So it will probably be a little bit of 9 time before we would learn more. MR. LESNIAK: All right. Thank you. 10 So Alan? 11 CHAIR BURMAN: Great. 12 MR. MAYBERRY: As I mentioned earlier, 13 great question, Chuck. You know, the answer is 14 it's still under investigation. That will be part of our investigation. It's just too early 15 16 to tell right now. 17 MR. LESNIAK: Well, maybe you'll have 18 a case study to encourage operators to rapidly 19 implement that rule and get into compliance with 20 it. 21 MR. MAYBERRY: Yes, certainly. It was 22 a self-executing provision. So it doesn't

1	immediately involve rulemaking. It could down
2	the road but
3	MR. LESNIAK: Okay.
4	MR. MAYBERRY: thanks.
5	CHAIR BURMAN: Okay, great. And
6	Chuck, did you have any other comments before we
7	move on?
8	MR. LESNIAK: No. Thank you.
9	CHAIR BURMAN: Okay. Great. If you
10	could just put down your hand. Seeing no other
11	members from GPAC or LPAC with any comments or
12	questions, I'm now going to move to the public.
13	John Stoody?
14	MR. STOODY: Thanks. Just a really
15	quick comment. Thanks for your mention of
16	Section 104. It was great to hear the outlook
17	that there could very well be projects that would
18	benefit the environment in ACAs, and I'm so glad
19	you're keeping an open mind on that.
20	Something on the dates. You mentioned
21	the five year timeline. That may have been a
22	slip of the tongue. Section 104(c)(2) has the

program expiring three years from enactment or at least that would be the last time somebody could approve a new pilot program. And with the one you're already passing, that means there's only two years to go. So glad you're working on the guidance. And we'll look forward to seeing that as soon as possible.

CHAIR BURMAN: Great.

MR. LEHMAN: And thank you, John.

Thank you very much for the clarification. Yes,

it was a slip here.

CHAIR BURMAN: And just for the record, John is with the Association of Oil Pipeline. Great. Does anybody else have any comments or questions? I know these slides are really important, especially as they lay out what is required when and then what exactly some of the underlying things are to be done.

I do know that, especially as it's talked about engagement with the states and others, it's really important. And as we look at the importance of SMS, it's now timely for us to

introduce the next agenda item, which is a 1 2 briefing on SMS. I'm going to turn it now over to Massoud and his fellow panelists. 3 Thanks. 4 MR. TAHAMTANI: Good afternoon, Madam 5 Chairman. Just a soundcheck. Can you hear me? 6 CHAIR BURMAN: Yes, we can. 7 MR. TAHAMTANI: Great. Cameron, if you would, bring up my slides, please. 8 9 CHAIR BURMAN: We can now see your slides. 10 11 MR. TAHAMTANI: Thank you very much 12 Good afternoon, Madam Chairman and again. 13 members of the Committee. I'm pleased to talk to 14 you about the Pipeline Safety Management System, And the main purpose of this session is to 15 really hear from our industry partners about the 16 17 progress they've made. 18 But before that, I'll make a couple of 19 remarks, if you will, about where we've been and 20 where we're going, and then very excited to talk 21 to you about our own PHMSA internal SMS.

Next slide.

It goes without saying that the conversation on SMS and pipeline industry came about as a result of the NTSB recommendation that stems from two major pipeline accidents back in 2010, San Bruno and Marshall, Michigan. And as a result of that recommendation to API, a Committee was formed. I was fortunate to serve on that Committee.

It took us about two years. And in 2015, API issued RP 1173. But as you heard a bit, the Merrimack accident brought an additional focus on SMS, and I'll talk about it a bit later.

Next slide. Next slide, please.

We all believe -- I think everybody on this call believes that SMS is really the key to closing the gaps that cause accidents. We all also believe that since the early 1970s, when the first set of regulations were put into books and also pipeline safety was created, those minimal regulations have significantly advanced the safety of our pipeline system.

And we believe that SMS is that

umbrella that will get us to that goal of zero incidents that both PHMSA and the industry have. And we also believe that this Pipeline Safety Management System cannot happen as good as it should without a very strong safety culture to begin with.

Next slide.

Our expectation has been, since the beginning back in 2016 when we were asked these questions, that we expect the industry to adapt or implement Pipeline Safety Management System.

But as I said, when Merrimack happened, there was a lot of talk about whether SMS should actually become regulations.

And I believe this is Congress's way of trying to monitor the implementation of SMS by the industry. Like they just mentioned, Section 205 of the PIPES Act mandates that we submit a report to Congress by the end of 2023 and report certain information.

Next slide.

We also report the number of gas

distribution systems that have implemented a pipeline safety management system in accordance with RP 1173. We also report the progress adopters are making and the challenges they're having.

And we also are to report the feasibility of the operators' implementing based on size, or smaller operators may have difficulties to implement SMS, although I believe RP 1173 was designed to be scalable for any size operator to implement that RP.

Next slide. Next slide, please.

And I believe Dave mentioned this too, that in that report, the Secretary has to provide guidance or recommendation that would further the adoption of Pipeline Safety Management System by the industry.

It went on to also say that the Secretary, PHMSA, and the state shall promote and assess Pipeline Safety Management System, and both the state and PHMSA will continue to promote the implementation of SMS for pipeline outliers.

Next slide.

So, where we're going, I think it's clear that we all need to be thinking about implementation of SMS with emphasis on a strong safety caution because they go together as a group.

Next.

And the actions we're taking, as I said before, both PHMSA and our state partners, we continue to promote the adoption and implementation of SMS across all the pipeline that we regulate.

Within PHMSA, a couple years ago, we decided that we need to also walk the talk. And we have provided foundational training to all of our employees. We have a pretty strong draft SMS policy that has been reviewed and will hopefully get approved by our leadership.

And we came up with our own SMS. It's called PHMSA Plus, and I'll talk about that a bit later. And then we're in the process of actually coming up with key performance indicators to have

PHMSA Plus drive efficiency with all of our programs at PHMSA.

Next slide.

Another thing that we did -- and my thanks to my counterpart, Linda Daugherty. She came up with this. So this card was laminated and was sent to all of our 500-plus employees both on the pipeline side and on that HAZMAT side so that every employee begins to be aware of PHMSA Plus and the SMS concept.

Next slide.

So Plus stands for performing our tasks and programs and everything that we do at PHMSA at the highest standard possible, that we lead by example, and that we unify all of the PHMSA areas so that, again, it brings about efficiency and we find the gaps, just like SMS tells us, and address those gaps.

And, of course, it goes without saying that safety has been and will continue to be our top priority, and of course the protection of the environment, like Alan said. We've always been

1 involved with protecting the environment, but now 2 we have a new mandate to obviously reduce methane emission from the pipeline systems. 3 4 Next slide. Next slide, please. 5 And, as you can see from here, the PHMSA Plus elements are very similar in line with 6 the ten elements that are within RP 1173. 7 8 Next. 9 And our PHMSA Plus is based on the 10 PDCA cycle. 11 So now, with that, I will turn it over to John Hill, who is the Chair of the Pipeline 12 13 SMS Industry Team, and Cindy Graham, who is the Vice Chair of the team. 14 15 John, now to you. 16 MR. HILL: Thank you, Massoud. 17 Just a sound check. Can you hear me 18 okay? 19 MS. GRAHAM: Yes, sounds good. Yep. 20 MR. HILL: Okay. Great. Sorry. I'm 21 having some technical issues this morning. 22 sounds like maybe some others are as well.

can't get my video working either, and I can't 1 2 get any of the incoming video. So I'm not sure what slide we're on, but I'm assuming just the 3 4 first stage slide. MS. GRAHAM: That's correct. Just the 5 title slide, John. 6 Okay. Thank you. 7 MR. HILL: 8 So good afternoon. As Massoud said, 9 my name's John Hill. I'm the Vice President of Natural Gas System Safety for Black Hills Energy. 10 11 Black Hills Energy is a combination gas-electric 12 utility serving a little over a million customers 13 across eight states in the -- I'll call it mid 14 and mid-mountain West. Today, I'm representing the Pipeline 15 16 SMS Industry Team as the current Chair. And, as 17 Massoud pointed out, Cindy is the current Vice 18 Chair. And so I will turn it over to her for 19 just a moment to introduce herself. 20 MS. GRAHAM: Thanks, John. 21 Hello, everybody. My name is Cindy Graham. 22 I work at Enbridge. My role is Director

of Safety and Reliability Governance at the enterprise level. And, as John said, I have the opportunity to be the Vice Chair of the Industry Team. And we're both looking forward to talking to you this afternoon, sharing about what industry is doing for Pipeline SMS.

Thanks, John.

MR. HILL: Yep. Absolutely.

So I appreciate the invitation today. It's an honor to be a part of a broad industry stakeholder group focused on the safety of our communities. And so Cindy and I will tag-team here across the presentation, kind of every other slide, as we go through the slide deck.

So just next slide, the 2021 Pipeline SMS Industry Team. And so who is the Industry Team? I think many on the call probably know, but just to confirm, the Pipeline Industry Team serves to enhance pipeline operations by supporting operators' adoption, implementation, and conformance to API 1173. The team's really been in formation since 2015 when the standard

came out.

And I'd be remiss in not highlighting we have a couple past Chairs on the call today as well. They're participating as LPAC Committee members now. But I'd just like to say thanks to Shawn Lyon and Angie Kolar for their past leadership of the Industry Team. And so, definitely, they did great work to get the team up and going over the past few years, and we're just trying to continue that work on today.

So, again, who are we? Approximately 30 members, individual members, I guess, representing the team -- gathering, transmission, distribution. It also includes nine trade associations at this point. So, for the past couple of years, we've added -- we continue to add to associations participating, including the gathering lines, midstream, and contractors over this past year and a half as well.

Our focus is in four strategic areas: increasing industry participation, external engagement, supporting operators' journeys -- and

I appreciated Alan's comments before about SMS being a journey, and we are on this journey together. And so the Industry Team really is there to support operators' journeys, and ultimately the governance of the team itself and of API 1173.

And so, just at a high level, from a voluntary implementation perspective, the survey from 2020, we've got about 56 percent of all industry pipeline mileage that responded to the 2020 survey. And I do believe we really covered more than that. The key -- and we've been talking about this over the past month or so -- really is to get more people engaged with that annual survey and how important it is for us to get information back through that survey so that we can share it with our stakeholders.

So, with that, I'll turn it over to Cindy for the next slide.

MS. GRAHAM: Thanks, John.

I'll just shift gears a little bit here. I want to talk about COVID, of course,

could have changed the way that we all work. The Industry Team was able to host a workshop on SMS yesterday. Of course, it was all done virtually -- really able to continue that engagement.

What I wanted to do at this point is
I just want to give a very short case study for
SMS. And we find that if we can share those
real-life applications of PSMS, it really is
helpful for operators to see how to apply it and
get benefits within their own organization.

So, very briefly, there are four key elements included in the recommended practice on this page. And we start with leadership and management commitment. And then, during COVID, what I observed is COVID actually gave an opportunity for leaders to demonstrate their commitment to safety. Whether it was providing regular updates to employees, getting directly involved in the COVID response through crisis management teams, it actually was unexpectedly an opportunity to show commitment.

Operating controls -- we know from

operators they had to develop special COVIDrelated procedures. They did that for all
employees, starting with the most critical
employees working in control rooms, but as well
for field and office personnel. Everyone had to
change the way that they worked.

Stakeholder engagement -- we know that operators were regularly, proactively communicating with their stakeholders during the COVID response. Internally, as we've said, new ways of working, employees and contractors.

Externally, messaging around safe delivery of energy -- the public, our customers, government, our regulators.

The fourth key area I wanted to highlight is around emergency preparedness and response. Companies had to adapt their more traditional existing emergency response structures/contingency plans to apply to their COVID response. And, certainly, at the beginning of the pandemic, operators set up incident command teams to ensure that they could continue

to operate safely.

So I think what this slide tells me -this case study tells me -- is not only would
PSMS not pause during COVID, it actually was an
opportunity to show that SMS is a very powerful
tool, a systematic framework that allowed
operators to navigate in that unknown situation.

So, with that, back to you, John.

MR. HILL: Thanks, Cindy.

So 2020 survey results -- and,

Massoud, I appreciate your conversation about how

PHMSA is really taking the framework, the plan
do-check-act cycle -- really kind of bringing

that internally to PHMSA.

We think about that the same way from an industry perspective as well. One of the key elements there, obviously, the check piece of that, is really one of the main purposes that we do our annual survey, really checking our progress, checking with operators on how their journey is going.

And so it gives us a chance to get

some data back, yes. I think data is important but doesn't tell the whole story. We do have a couple of items here just on the slide. I'll highlight them real quickly, just a 2019 versus 2020 look. A positive movement, really, in conducting gap assessments and closing gaps, really, management reviews and participating and sharing events.

And, really, what we were looking at from a check cycle perspective was how is the industry doing, and can we measure that in some way, the progress along the journey? And so I think the numbers came back pretty well for us. We looked at this as a positive movement on the SMS journey.

But, I think more importantly than
just these numbers, that last bullet on the
slide, really one of the key things we ask for
around -- what's the most challenging things that
the operators are seeing from an implementation
perspective? And really trying to use that
information to shape tools and workshops and to

address those current challenges for operators.

As you can see there, really, the key ones were operational control, documentation, record keeping, risk management, stakeholder engagement, and management review. And so Cindy will dive into a little bit of detail on those barriers on this next slide.

MS. GRAHAM: Thanks, John.

And as John said, we really do use that annual survey -- and it's just coming up now for this year -- to get information about what are the barriers.

so what you're seeing on this slide are actually some answers to the open-ended questions around what are barriers for operators in implementing PSMS. So I'll just -- we won't go through them all. You're probably glancing at them already. But a couple of examples -- and what I want to try to do is then tie that to the way that John and I believe the Industry Team can help support.

So I'm going to start on the upper

left bubble. You'll see there's comments about management reviews, KPIs, also on -- where is that other one? Yeah, okay. I found it. It's on the right, second from the bottom on the right: performance metrics.

What I can say is both of those topics
-- operators are looking for information on KPI
metrics, management reviews -- all of those
topics have been covered in workshops that we
host. As I said, as recently as yesterday, we
had a pretty in-depth presentation on KPIs. And
I know I myself have even shared about management
reviews. So that's a way that we can get
involved and help.

If we look at the bottom left, you can see that there is a desire to get more support for small departments, small operators. Again, yesterday, we had a presentation -- I found it to be very colorful -- from a small operator, about 23 employees, was able to share how their company is implementing PSMS and then took us through the elements.

So we continue to provide those reallife examples to make this all very tangible for
our small operators. We also know that as an
industry association/industry team, our partners,
AGA, APGA, have done a lot of work with
workshops, peer reviews, element assessments, and
even materials and tools that can help smaller
operators. So good work there.

You will see in the right-hand side a desire to get some guidance from a contractor perspective. John mentioned we have nine trade associations on the Industry Team, which I think is very powerful. That does include two contractor associations. So we're going to be able to do more work there to support contractors as they look to implement SMS within their businesses.

The last part I wanted to point out is

-- I'm moving now to the right-hand side. You

can see from the first comment on the upper

right, want to have some more information on how

they can incorporate 1173. Bottom right, better

understanding of the elements.

Again, when we see that, a desire for understanding the workshops, one way we can do that -- there's also a fair amount of free materials available on our website, pipelinesms.org, that operators can go in and access some really good tools to get started.

So, with that, I'm going to hand it over to John. He'll take us through some of the highlights -- some of the work that the Industry Team has done. And what I'm hoping is you'll see some of those linkages between what operators are telling us they need help with and what the Industry Team is able to do together.

And with that, over to you, John.

MR. HILL: Thanks, Cindy.

So industry highlights for 2021 could have filled up quite a few pages here and quite a bit of time, but really just tried to highlight some of the main things that are going on really connected to those challenges that Cindy was talking about.

And so the virtual workshops,
obviously in 2020, we moved in-person workshop to
virtual. That was the first time that we
conducted virtual workshop, and really ended up
seeing attendance go up in many cases from a
virtual perspective.

So did that again this year in 2021, as Cindy talked about, and really trying to engage the attendees and talk about, specifically, those challenges that we saw in the survey.

would also highlight AGA and APGA's continued work in this area -- really, all the industry trade groups do do a lot of work with their individual members. And what we tried to do here is really just capture a few of the things that are going on within those industry trade groups as well, so AGA creating a virtual assessment pilot this year for PSMS. So I know our company, Black Hills Energy, participated in that, was one of the first to participate, and provided

feedback on that program. And that's a good way for us to work with our peers and learn from them on where they are in their journey as well.

And from a broader perspective, I
would say kind of a whole PSMS assessment, API
continues to engage with their third-party
assessment program. I will say -- and I know
Dave Murk is on the call as well, probably some
others from API.

I think the COVID situation has had a large impact on this assessment process, more so than the workshops and other work that we did because, really, the assessments were meant to be in person. They were really meant to come onto site to interview and engage, to get a good flavor of the safety culture that's going on.

That's just very difficult to do from a virtual perspective. But I do appreciate API continuing to push through on that, and the operators that volunteered to be a part of those assessments for 2020 and 2021. And so you see the numbers there are probably nearing eight

assessments by the end of this year, and I know we've got a few more in queue for 2022 as well.

From an industry participation

perspective, we talked about the virtual workshop

that the Industry Team puts on through API. But

APGA also completed a virtual workshop, and also,

from an APGA perspective, really highlighting

their work at the executive level, CEO level,

board level, creating an Executive Steering

Committee around PSMS and also an Operational

Risk Data Committee to increase sharing across

the APA members.

And then from an external engagement

-- the one thing I would really highlight, I do

appreciate meeting with regulators and

stakeholders each year that we've done that the

past couple of years. But one of the things that

we added this year was a broad industry regional

trade roundtable, and just a great opportunity

for us to connect with a broader set of industry

trade groups that are working on PSMS as well.

And so just -- I think we've talked

about it on the call a couple of times today, really, this idea of clarity, communications, transparency, really trying to gather all of the information on PSMS implementation that's happening across the industry.

So, with that, I'll do the next slide.

I'll touch briefly on API RP 1173's path forward.

As many of you may know, the recommended practice was published in July of 2015. API's standard practice is that action needs to be taken every five years, even on the recommended practices as well.

And so 2020, as you can imagine, was a pretty crazy year for everybody with the COVID situation. So we actually asked for an extension, a two-year extension, in 2020 out to 2022 to take action on the recommended process.

So there is a standard policy group meeting right now to review and identify potential revisions to this first edition. And at the same time, we'll be working to develop a balanced voting group over the next six months or

so, so that we can take action on the first
edition of 1173 by the summer of 2022.

I'll hand it over to Cindy now -- back

MS. GRAHAM: Thanks, John.

to Cindy for some conversation on safety culture.

And, actually, Massoud, you started us off perfectly here. John and I wanted to talk about PSMS, but we, like you, know that you really can't have an effective PSMS without a positive safety culture. As you said, they really do go hand in hand.

So I'm seeing some good things here.

Industry continues to evolve the way that they're able to measure safety culture, and doing that in a consistent way industry-wide. Last fall, liquid pipeline operators participated for the first time in the Industry Safety Culture Survey. And the survey was based on the INGAA/CEPA survey that has been going on for years.

So it's pretty exciting in that it's going to allow even more benchmarking within industry, sharing of best practices, and

ultimately identification of trends and opportunities. In 2023, U.S. and Canadian gas/liquid transmission operators will redo the survey again. So this is going to be a powerful complement for industry with PSM (phonetic).

And with that, over to John to discuss our current priorities as an Industry Team.

MR. HILL: Yeah, so we'll just close out on this last slide, just talking a little bit about strategic priorities for 2021, really kind of closing out this year, again, some of the accomplishments that we've had, and also really setting ourselves up for success in the future as well.

So as we meet again, probably later this year, as an Industry Team we'll be looking at these four strategic areas once again and be focused on how we're going to continue to provide operator support and increase industry participation, continue to engage with our stakeholders, and providing governance and oversight.

So what you see on this last slide is really just a sampling of the things that we're going around this toward the end of 2021 here.

And one of the key things that's in motion at the moment is the 2021 survey, and so just a chance to plug that survey once again and highlight its importance.

I can't think of any other way that we as an industry collect all the information from the operators that are on the PSMS journey. This survey is a way to collect that information from them, to engage the operators, to understand what's happening with them, and help support them in their journey.

And so the key thing really happening just over the next few weeks is that survey will be released out to the operators. The operators will complete that survey by the end of this year into early 2021, and we'll have results from that survey folded into our 2022 annual report that'll come out in a February or March timeframe.

So, with that, I will close and just

say thank you once again for the time today.

It's great to see this topic in this forum. It shows the recognition, the importance across the industry, that the stakeholders place on Pipeline Safety Management System. So appreciate the time today.

CHAIR BURMAN: Thank you so much. I appreciate that as well.

I'm going to ask, if anyone has any questions, if they're on GPAC or LPAC, to raise your hand or in the comments, as well as the attendees.

I do just want to say that I

personally, in my capacity as a state regulator,
have seen the effectiveness of working through a

Pipeline Safety Management System and the API

1173. I'm particularly happy to note that NTSB

was and continues to be focused on supporting how
we may all work together to implement API 1173

pipeline safety management practices, or similar

Pipeline Safety Management System protocols.

I know that PHMSA and others have been

1	very much engaged in such efforts with
2	stakeholders, including the states and the
3	utilities. I love that PHMSA has its own
4	internal protocols in looking through that
5	program, and I'm particularly pleased that the
6	API 1173 actually contemplated and incorporated
7	pandemic activities into the SMS culture and
8	operations. And those API 1173 activities and
9	hands-on exercises can and were beneficial to
10	helping deal with COVID-19.
11	So I was glad to see that, and I love
11 12	So I was glad to see that, and I love the focus that you can't have an effective
12	the focus that you can't have an effective
12 13	the focus that you can't have an effective Pipeline Safety Management System without a
12 13 14	the focus that you can't have an effective  Pipeline Safety Management System without a  positive safety culture. So thank you for that.
12 13 14 15	the focus that you can't have an effective  Pipeline Safety Management System without a  positive safety culture. So thank you for that.  I do see a hand. Let me just see.
12 13 14 15	the focus that you can't have an effective  Pipeline Safety Management System without a  positive safety culture. So thank you for that.  I do see a hand. Let me just see.  Ron Bradley? And again, just for the record,
12 13 14 15 16 17	the focus that you can't have an effective  Pipeline Safety Management System without a  positive safety culture. So thank you for that.  I do see a hand. Let me just see.  Ron Bradley? And again, just for the record,  remind folks who you are, your organization, and

on the GASPAC -- gas committee, Gas Pipeline

Committee.

21

So the presentation was exceptional, Cindy, John, and Massoud. That was really great. And just, Chairman Burman, as you were speaking, I was about to put my hand down because you said everything I was going to say. So I'll just layer one more thing.

If this also takes resources, we are so -- this is one of those things that makes me proud to be an operator in this industry when something comes along that's going to make a difference and we don't have to sit back and say, well, force me.

We all come to the table together, in a sense. We're going to do it, and even if it means we're going to staff up where we have to staff up. We're going to get engagement where we have to get engagement. We're going to put staffing plans together and figure out how to get treated properly for it later, but it's the right thing to do.

We're doing it. The American Gas
Association is all over this. The Board of

Directors of AGA is all over this, just cheering with you. So I wanted to give you some encouragement. We're all pulling in the right direction. Thank you.

CHAIR BURMAN: Thank you so much. And if you could put your hand down, that would be great.

And then Andy Drake?

MR. DRAKE: Thank you, Chairman
Burman.

This is Andy Drake with Enbridge on the GPAC. I just want to say thanks to this group for bringing this up. I think that is a great presentation.

I think that I like some of the things, Massoud, that you said. I just wanted to tease out one thought, and that was we learn so much from other industries that have matured, made the step change on safety prior to us, like nuclear and aviation and others. And, obviously, they have instituted safety management systems, and they've been very integral to their success.

As you look at where we are in the lens of others that may be more mature than us on safety management systems, how did that inform the thought of a three- to five-year plan of what are the next steps to keep advancing this beyond just building on 1173?

I don't know if you had any thoughts on that, maybe Massoud. But I'll open it up to Cindy and John as well.

(Simultaneous speaking.)

MR. HILL: Massoud, I was just going to say that was a great point, and it's a good lead-in, too, because yesterday at the workshop that Cindy was talking about, our keynote speaker was Captain John Cox and his view of where the airline industry has come and the success that they have had with Safety Management System and his work, really, to bring a lot of that information and a lot of his learnings over to the pipeline industry as well.

And so you bring up a great point. We are definitely open to learning from other

industries, and that will inform us on where we go in the future. And I would say one other thing.

I believe that we've been able to use those other industries and those examples. I think it's been noted that, really, since probably 2012 or so when we started working on the recommended practice, that we've been able to accelerate the journey even faster than those other industries because we've learned from them.

And so I think if you look just in the success that we've had in the short time -- a little over five years -- that the recommended practice has been in place, I think a lot of those successes have to do with us learning from the other industries.

MS. GRAHAM: I'll just add to John's point something that I found interesting yesterday. By the time the FAA mandated SMS for U.S. airlines, John recorded that all but one airline already had their SMS. So that speaks to how that industry got ramped up and participated.

1 CHAIR BURMAN: Thank you. 2 And Dave Danner? Thank you, Diane. 3 MR. DANNER: 4 I just wanted to echo your comments 5 and let everybody know that you're not alone as a regulator in the thoughts that you express. 6 7 think that was a great presentation. I really 8 appreciate it. 9 I'm just speaking out loud, so people, don't freak out. But a lot of state regulators 10 11 are now looking at a concept called performance-12 based rate making. And we actually have a state 13 statute that requires us to start exploring this. 14 So it may be that state regulators can 15 help in this regard by setting up some metrics 16 and providing incentives for utilities to 17 continue on this journey. And so that is 18 something that perhaps we can explore with AGA and other stakeholders as we go forward. 19 Thank 20 you. 21 CHAIR BURMAN: Thank you. 22 Does anyone have any comments as to

what they heard? And that was Dave Danner, 1 2 Washington state regulator. Thank you, and member of 3 MR. DANNER: 4 the GPAC. 5 CHAIR BURMAN: Right. Great. The other thing -- oh, Alan? 6 7 Mayberry? 8 MR. MAYBERRY: Yeah, thanks, Madam 9 Chair. 10 I just wanted to recognize what Massoud covered related to SMS for the regulator. 11 I think this is probably the biggest opening or 12 look under the hood that we've had, sharing with 13 14 you some internal materials that we've had for 15 the first time. 16 So we're walking the journey with 17 everyone on this. It's not been easy, but under 18 Massoud's leadership and Linda Daugherty's 19 leadership, our deputies for field ops and policy 20 and programs, we're making great progress in that 21 And we're really excited for our own

22

internal SMS.

1	So thanks for covering that, Massoud.
2	CHAIR BURMAN: Wonderful.
3	And I think let's see. Dave
4	Danner, is your hand still up to say another
5	comment, or
6	MR. DANNER: No, I'm sorry.
7	(Simultaneous speaking.)
8	CHAIR BURMAN: That's okay. That's
9	great.
10	Okay. So I think now we're on our
11	final agenda item. Thank you very much for the
12	presentation that you just did on SMS.
13	We're now going to go back to industry
14	performance and incident history with David.
15	MR. LEHMAN: Yes. Hello. How are
16	you?
17	CHAIR BURMAN: Great.
18	MR. LEHMAN: Yes, I'm pulling it up.
19	You should be seeing it soon.
20	CHAIR BURMAN: And we can see your
21	slides now. Thank you.
22	MR. LEHMAN: Oh. Okay. Thank you.

And also wanted to give a shout-out to 1 2 John Gale and his team. Unbeknownst to you, I lost feed for a 3 4 little bit, and they just jumped right in for my 5 So they're ready again in case I have some more technical issues. 6 7 Good afternoon. Once again, I'm Dave 8 I'm the Director of Program Development. Lehman. 9 This is an exciting topic for me. I was a mathematics major, and one of my roles in program 10 11 development is to look at the data, identify and 12 explore trends, and work with SMEs in the 13 government, industry, academia, and the public to 14 examine and work with possible solutions. 15 Looking at performance is integral to 16 SMS and PHMSA Plus, so I think this is a good way 17 to kind of -- ending the day right after the SMS 18 presentation, which was just fabulous. 19 CHAIR BURMAN: Hey, David, if you 20 could just speak up a little bit more, I think some people are having trouble hearing. 21 22 MR. LEHMAN: Yeah. Okay. I'm going

to hold the phone as close as I can to my -- so, to set the stage, let me get -- really, for this presentation, I'm going to show industry performance and incident information through the lens of our National Pipeline Safety Performance Measures.

These performance measures were developed with OPS -- for OPS and with OPS through a consensus process. To develop the gas distribution and gas transmission performance measures, OPS worked with our state partners in NAPSR, the Pipeline Safety Trust, and industry representatives from the American Public Gas Association, or APGA, and the International Gas Association of America, INGAA.

And these performance measures I'll be sharing today were put in place in 2015. But in 2017, OPS put in place hazardous liquid performance measures, a similar process that was used working with the Pipeline Safety Trust and industry representatives from American Petroleum Institute and the American Association of Oil

Pipelines.

So amidst that effort there, I had the pleasure of assisting with this effort when I was the Director of Oil Spill Preparedness and Emergency Support Division. So what I'm going to do is, in a few minutes, I'm going to highlight what these are. But I really need to set the stage in where we are.

So you've probably seen this slide.

And I was taking care of some technical issues,
so if this is a repeat slide, I do apologize.

But what this really does is it shows that,
basically, the total mileage of pipeline industry
is quite extensive in the United States. And, in
fact, it's been increasing steadily over the last
ten years.

For example, the hazardous liquid pipeline miles have increased 22.5 percent over ten years. And so all the numbers I'm going to give you are ten-year timeframes. There have been some decreases. There's a one percent decrease in gas transmission. Most of that

decrease occurred in the offshore transmission pipelines, and offshore only accounts for less than one percent of the transmission lines.

Gas gathering pipelines has also decreased by approximately 11 and a half percent. However, there has been an increase of seven and a half percent in gas distribution in the past ten. And, once again, LNG facilities have gone up 30 percent. And we just now recently conducting underground natural gas storage, so I can't tell you how much that's increased just yet. But we are monitoring those increases.

Also, as we look at these performance measures, and to go through some of the definitions that we use here, the first one is serious. I'll be spending a lot of my discussion today on the serious incidents and accidents, and these are the ones that involve fatalities or injuries that require inpatient hospitalization.

All of our data that you'll be presented exclude the fire first. And what I mean by fire first is basically where the fire,

specifically mostly in distribution systems, are caused by other outside source damage or some causes -- you know, house fires where pipelines were later exposed. So those are excluded. So, really, what we're focusing here are incidents that occurred as a result of the pipeline itself.

Significant is another term that we use, and there's the five criteria. Once again, it covers the serious, and then it looks at total cost as measured in 1984 dollars. So, for reference, that's approximately \$112,000 in today's dollars.

Then HVL releases a five barrels or more. Non-HVL releases a 50 barrels or more, and then any liquid release that's an unintentional fire or explosion. So those are considered significant.

I will note, when you look at those definition of significant, especially in the gas distribution and gas transmission, the first two elements really are the ones that drive the significant incidents for those types of systems.

So each element, I'm trying to provide a little bit of context on how pipelines have related. So I think you should be able to see my cursor. The blue line here, that's a serious incident. And, once again, that's involving the fatality or hospitalization, injuries.

And then how does this relate to the pipeline industry, pipeline mileage, and how much energy resources we consume? As you can see, everything's been going up, with the exception of the serious incidents. And, actually, we've been better conserving our petroleum consumption.

But everything else is going up. I'm not trying to -- really, when you sit there and see that from 1.0 to 1.2 -- that's 20 percent increase -- and the numbers that I quoted as far as the pipeline mileage, you see that pretty much marries up. And over that same time, the U.S. population has increased almost 16 percent.

So that puts context. So, really, what that also helps us do is look at the risk of involved with this. So there's no risk out there

because the -- in contact with people more.

There's more pipeline that could have potential issues, but the good news is the performance indicators for pipelines are showing a good trend downward.

So I'm going to start off a little bit backwards from what I did up front, and I'm going to start with a crude and refined product. This one, we're first going to look at serious, and then we look at the rate per mile and the causes of those. And why we look at rate per mile -- and rate per mile is a constant theme through this -- really, that's to normalize the data. So that way, kind of like in the context position, we look at how many incidents per mile or many cases per thousand miles.

The other one is impacting people and the environment, once again rate per mile, and then also the volume spilled about per mile transported. And then, finally, miles inspected and type of inspection method.

Now, due to the time constraints, I'm

not going to focus on all of these performance measures. I'm going to kind of highlight the ones specifically focusing on the serious ones first, and then some others that could be of interest to you as well.

So, starting off with the serious incident rate, while the incident rate has fluctuated over time since 2005, the overall trend is trending downward. And that trend line is computer generated, so it's not us making it up. It's really where the trend line is going.

And then when we look at the actual causes of these serious incidents, the largest cause, roughly half of it, is through incorrect operation. And incorrect operation by a company is sometimes referred to as operating error.

Examples of this operating error may lead to a release or inadvertent actions.

Examples include wrong valve opened, overfilling of a tank, over-pressurization of a piece of equipment, not following proper procedures, used the wrong equipment for the

procedure that's required. So those are just examples of what could be included in incorrect operation.

And so one thing I will point out, throughout this, you'll see a lot of graphics in this. All these are a part of our performance information that we provide available online, and I'll provide the link to that at the end of this presentation.

The next element I will talk about is the accidents impacting people and the environment. Here, once again, we see the trend line going in the direction we'd like to see it. You see that there is called -- I call it the camel hump, but -- around the '13/'14 timeframe. Then it starts going in the right direction.

This measure includes serious incidents, accidents involving emissions, explosions, evacuations, water or soil contaminations, public property damages, and unintentional releases of a volume of five gallons or more in high-consequence areas as

defined in 49 CFR Part 195.

And the leading cause is really -- and this probably represents 80 percent of the accidents, and these are in the order of greatest to least, explosion, and then equipment failure, incorrect operation, material failure.

So here you see for the impacting of people and environment -- so it's a broader look inclusion jump to the top, whereas under the serious incorrect operation was what you saw before.

So I'm going to move on to the gas transmission performance measures. Once again, I will really just kind of focus on the serious ones. So let's see. I'm not going to read all of them, but basically, we are looking at the serious incident rate and cause. Once again, serious is fatalities or injuries involving hospitalization.

On-shore here, for significant, I'm not going to touch on those just in the interest of time today, but -- and also areas with ACAs.

So the first one I'm going to touch on is the serious incident rate.

This is really, basically, per thousand miles. I note, though, really, the mileage of gas transmission hasn't fluctuated, so this basically closely aligns with the number of serious incidents.

And prior to 2010, the average number of serious incidents for the previous ten years was approximately seven per year. And since 2005, there's been an average of 2.4 serious incidents per year. So you see the trend line is going once again in the right direction. Once again, though, any injury and any fatality is one too many. So our goal is zero.

Once again, you see the different causes here. And one thing that pulls up here -- and you're going to see this as a recurring theme for the gas -- is excavation damage. So excavation damage is the leading cause for gas transmission serious incidents.

Within the excavation damage, third-

party damage is responsible for the majority of these. Third-party damages occur when a person other than the pipeline operator or contractor excavates and damages a pipeline system. Also, at the end of this presentation, I'll have a link to where you can find more information on our damage prevention information.

The second leading cause, as you can see by the purple here, is other outside force damage. Within this cause, vehicular damage is responsible for most. And when we look at the narrative of the company incident reports from the operators, they usually mention an impaired driver or a reckless driver.

This is another one of the five -basically, what we're looking at here is the
incident rate by the year of the pipeline
installation. So what we're finding is -- the
little graphic didn't show up really well, but
this is unknown and pre-1940. This is the 1940s,
and this is the '10s, so 2010 to 2019, just so -leading causes is corrosion and then material

failure, and then up to here, it's equipment failure. And we'll discuss that a little bit more later here.

Now, this is actually not one of the actual performance measures you will find on our website because -- I want to do a shout-out to Blaine Keener and his team in the Operations System Division. This is a newer chart than has been circulated within PHMSA. And I know Alan likes charts.

But really, what it does is it really kind of does show the bathtub curve, a little bit of a jagged bathtub. I wouldn't want to sit in it, but -- so, really, once again, we find that -- so this is out time. So this is year to day and out beyond.

So, from there, you can see that early failures are caused by equipment, so in other words, it's not the pipe or the weld. And then you start seeing the pipe and weld are the green assessments showing up on years -- and that's this chart here that goes up there -- really

begin to increase at the 30-year mark. And then late failures are predominantly welding failures.

So this really kind of does coincide with the previous slide I showed you. So this is a phenomenal piece of work that I think that Blaine and his team has done. So kudos to them.

Well, I'm going to move on now to the gas distribution performance measures. Once again, these are the ones that were developed by the work group in 2015. In this case, I'm going to just once again look at the serious rate.

Then we'll look at excavation damage, and then I'd be remiss if I didn't talk about some of the higher-risk materials that are still out there.

So, once again, we see the good trend lines. Incident rates are going down, but we're still seeing some issues, and especially with the cause. Once again, there's the trend, excavation damage and other outside source damage, same issues that we've seen.

I'm going to delve in a little bit more into the excavation damage next. And this

one has some kind of interesting information. So what we're seeing here is people are calling in to 811. That's what the blue line is. So that's basically the damages per thousand tickets. And so we're seeing the trend line, and that's really showing that people are calling in.

And I looked at other data, through like the Common Ground Alliance, and found that really, we, Joe Public, are calling in more frequently. Where are we seeing it? Really, it's in the excavation damages. Who's doing it? Once again, that third party.

And the causes are the main categories of excavation damages. So we do have subcategories for each of these, and the subcategories for excavation, not sufficient locating practices, not sufficient and the like. When we have the subcategories, these do align with the Common Ground Alliance Damage Incident Report Tool, or DIRT.

Of note, the CGA's 2020 DIRT report was published just last month and is available on

CGA's website. I do encourage you all to take a look at that. And that is for all utilities, not just pipelines. But they also have some nice little tools that you can go in and kind of tease out data from it. I had a little bit of fun with that as I prepared for this meeting.

excavation practices not sufficient include

failure to maintain clearance, failure to

maintain the marks, failure to support exposed

facilities -- so, as you excavate, they collapse

on it -- failure to use hand tools when required,

failure to verify location by test-holing or

potholing, and then improper backfilling.

Subcategories for locating practices not sufficient include the facility couldn't be found or located, the facility marks of the location were not sufficient, the facility was not marked or located, and then incorrect facility records or maps.

And so the facility not marking and located, one of the interesting correlations I

found to the Common Ground Alliance data was approximately ten percent, the markings were in the wrong place. So off by an eighth in some cases. So that's kind of why we would obviously see excavation damage.

And I will say, in a personal experience, I had a brother-in-law who did all the right things, called 811. They came out. When he put a shovel in the ground, he hit a pipeline because it was mismarked by over two feet. So, fortunate for him, I still have him around. My sister does as well. But it does show the dangers of mismarking.

so I'll move on to the higher-risk materials. As we see here, the trend lines are going in the right direction. Right now, we've seen nearly a 50 percent decrease in bare steel since 2005, and it only constitutes three percent.

Unprotected, roughly 40 percent decrease since 2005, once again three percent of all gas distribution systems. And unprotected

steel -- excuse me, unprotected coating, 12
percent decrease since 2005. And that
constitutes one percent of gas distribution
systems.

So, overall, 28 percent of the gas distribution systems were installed pre-1970.

Mileage of pipeline systems installed has declined as well. So we're heading in the right direction on this one. Still more work to do.

And then this is my final slide of performance measures and, really, talking about the cast iron and wrought iron pipelines.

They're more susceptible to damage by earth movement than other modern materials, such as steel or plastic. And it was mentioned earlier that we are looking at ways that we can incentivize and encourage that through grants and other things in the future. So that is on the table. So we would like to see this go down.

And I do want to point out that we also have a website. If you go to this performance measure on high-risk materials for

gas distribution performance measures, you will have a link to everything that's going on with reducing these higher-risk materials.

And, finally, where I said you can get some additional information, data, and statistics -- basically, if you go to our website, one of the items is More Resources, Data, and Statistics. That'll take you to the same site as this.

When you go through that site, over on the left-hand column, it'll say National Performance Measures. And each of these items that I went through today, plus ones I did not -- it has detailed information on that. And what's nice is you can drill down and go deeper into each of those columns and look at the actual data that helped produce that information.

So I encourage you to use that. And I did not provide a link, but cga.org is where you can find the Common Ground Alliance's DIRT 2020 report.

So with that concludes my

presentation. I thank you for your time. I'm open for questions, although I might need to pull in some others to help me answer.

CHAIR BURMAN: Thank you so much.

That was really comprehensive and detailed, and all of that information is really, really critical for us to have and to have a summary analysis and drill down.

I'm going to see if anybody has any comments. I don't see anyone on -- oh, GPAC, Ron Bradley. Thank you so much.

MR. BRADLEY: Thank you, Chair. Ron Bradley from PECO or GPAC. Dave, thanks for the presentation. Just a quick question. On the distribution side, did you see an impact in excess flow valves? Obviously, if there's a hit, it will shut down releases of gas and make the area safe. I'm wondering if you're seeing that make a difference in the industry.

MR. LEHMAN: That one -- I am going to defer that question over. I have seen those as - - when I was in the Oil Spill Preparedness and

Emergency Support. Anything that was a serious incident I would see, I did see an impact in those. And that was always one of the first questions that we got asked from NTSB and others on that one.

But I'm going to defer if Blaine is still on. He's the one that -- he sees everything. So I'm going to defer to Blaine if he's available.

MR. KEENER: Yeah. Hi, everyone.

This is Blaine Keener with PHMSA and the

Operations Systems Division.

For excavation damage, most of the time, the problem happens over the ditch, not with a migration into the house problem. So I'm not sure that excess flow valves can really be tied to just one incident cause.

We haven't really taken a close look at trying to determine what incidents may have been avoidable due to -- if an excess flow valve had been in place. So that's not something we look at (audio interference) looked at that

1	(audio interference).
2	MR. BRADLEY: Thanks. I think I might
3	be thinking about something a little bit
4	different. But, I mean, if an excess flow valve
5	is installed right and someone digs into the
6	service or knocks the meter apart or just you
7	have a blowing gas situation, it will lock up and
8	basically stop the flow of gas up that service
9	and then to the atmosphere.
10	So yeah. I think over time, we'll see
11	a difference. We'll just keep watching for it
12	because we're putting more and more of those in.
13	So thank you. Thanks for your presentation
14	today, and thanks for the response.
15	CHAIR BURMAN: Thank you so much for
16	that.
17	And now we have Bill from Pipeline
18	Safety Trust.
19	MR. CARAM: Hi. Thanks, Chair Burman.
20	This is Bill Caram with the Pipeline Safety
21	Trust, a member of LPAC.
22	First off, thank you, David, for a

great presentation. I just want to ask, if it's 1 2 possible in the future, it would be really great to get these presentations ahead of time to be a 3 4 little more prepared. But, again, thank you for 5 a great presentation. So, I do have one question. Are there 6 plans to add HVL and CO2 lines to the National 7 8 Pipeline Performance Standards? 9 MR. LEHMAN: In discussions as I was preparing this -- and I pre-briefed Alan and 10 11 Massoud -- we all discussed and say, yes, it is 12 time to look at updating the performance and 13 revisiting that. 14 I see Alan has his hand up. He probably wants to chime in as well. 15 16 So, Alan? 17 MR. MAYBERRY: Yeah. One of the areas 18 -- like Dave said, we were just talking about 19 Good question, Bill. And I think it is that. 20 time to revisit those national performance 21 metrics.

Your predecessor, Carl Weimer, helped

us greatly as we developed those. But it's probably time now for a reality check, so I think we should be talking, going forward by getting -- if not that same band back together, maybe a different band to take a look and take a look at refreshing those.

And, by the way, one of Dave's role -who -- Dave, as he mentioned earlier, he's
relatively new in the role, but he's soon
developing PHMSA's analytical agenda. And that
squarely falls within that domain and looking to
make certain improvements in how we present data,
how we use the data to derive information, and
certainly related to data visualization of the
information you see.

And so improving those national performance metrics, which you come to right when you click on the Data and Statistics button on our website, would be part of that. So thanks for the question.

CHAIR BURMAN: Great. Thank you.

And I don't see any more from GPAC or

1	LPAC with any comments. I just will now go to
2	the public attendees.
3	And John Blanc?
4	MR. BLANC: Hey. This is John Blanc.
5	Can you hear me?
6	CHAIR BURMAN: Yes, John.
7	MR. BLANC: Yes. Thank you very much.
8	Yeah, thank you very much for the
9	presentation. Going back to the slide where it
10	talked about the serious incident rate and cause,
11	based on the pie chart, I believe more than a
12	third of the incidents were attributed to
13	excavation, and the other third was outside force
14	damage.
15	I'm a senior quantitative engineer for
16	PECO.
17	Well, actually, not that one. Maybe
18	the one before. Sorry about that. Yeah, that
19	one. Yeah.
20	Yeah, naturally I'm inclined to look
21	at mitigating measures to prevent them from
22	occurring, but seems like these are more like

I guess the medical community calls them singleincident trauma cases where it happens once and
it's very difficult to, I guess, prevent it from
occurring.

So I was wondering, what was your take on that? Because it seems like a pretty interesting distribution. I think I'm looking at that right. That's the -- that's not equipment -

(Simultaneous speaking.)

MR. LEHMAN: Yes. Yeah, those are not equipment failures. So the excavation damage -- our damage prevention programs that we work on our typing the green piece the 102 there. The 108 is the more challenging, and others will probably join me in this discussion.

But those are harder to tackle in the sense of -- I mean, it's amazing how aerodynamic or airborne a vehicle can go, and they tend to always land on a pipeline facility. I don't understand why that happens, but it does. I don't know how many times over the seven years I

was in the Emergency Support role.

And you would see those very

frequently, at least once a week, sometimes twice
a week. And that's what the data's showing you
as well. So it's kind of like they have an
uncanny way of doing it, and I know he knows as
well, how to tackle that. I think that's a -more discussion needed.

So anyone else from PHMSA like to join me on that one?

Or did that answer your question?

MR. BLANC: Yeah. No, it answers it,
but I was just wondering because, seeing so many,
it just seems like there's other ways -- if it
was equipment failure, there's ways to mitigate
it. But when you're looking at over a fourth,
and a fourth if you combine the two, that's
nearly half of the incidents are almost -there's almost nothing you could do other than
hope for the best. So I just wanted to point
that out.

MR. LEHMAN: Yeah. Thank you.

Thank you so much. 1 CHAIR BURMAN: And 2 I think the next, then, is Christine. Christina? Thank you, Commissioner 3 MS. SAMES: Christina Sames, American Gas 4 Association. And I'm actually going to tie on to 5 that last point, that 108 other outside force --6 7 AGA actually stood up a -- what we call the 8 Operational Risk Data Committee. And that 9 Committee has been doing a deep dive into some of these incidents to try to figure out, how can we 10 11 drive down some of these incidents? 12

And when we looked at other outside force, what we found was almost all of them were other outside force vehicular damage not due to excavation, basically vehicles -- at least 40 percent are vehicles that are going through fences, through bollards, through, really, what they shouldn't be going through, and hitting above-ground structures, meters, pipelines.

It's amazing how vehicles seem to find things that they really shouldn't. I think my favorite one that I looked at was a tractor-

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trailer that decoupled that went through a field, hit a Walmart with such force that it moved the meters on top of the building.

one thing that AGA has been encouraging is a look at other technologies beyond physical barriers that can help prevent these incidents, things such as breakaway technologies that will stop the flow of gas if a meter is hit, or installing excess flow valves on existing pipelines to help shut down the flow of gas if excavation occurs or, again, if a vehicle hits a meter.

We can't solve everything, but I know that the group feels pretty strongly that we have to look beyond the traditional at this point to some of these new technologies that we really think can prevent these incidents.

I loved seeing these charts. And between excavation damage and other outside force, if we can solve those two, we get rid of more than half of the incidents on the distribution side.

Thank you.

CHAIR BURMAN: Thank you so much for those thoughtful comments. Does PHMSA want to say anything to what they just heard?

MR. LEHMAN: No, I will just echo because when I've read some of the summaries of the incidents, physical barriers are not going to stop that type of momentum. So I applaud the efforts you all are doing as well.

CHAIR BURMAN: Okay. With that, I
don't see any more comments or questions from
either GPAC or LPAC Committee members or from the
public.

I'm now going to turn it over to Alan for wrap-up, I believe.

MR. MAYBERRY: Yes. Thanks, Chairman Burman.

And just want to call your attention to one item. I just want to give you just a little clarification on our presentation that we had to cut short on security. You're going to see the full slide that posted to the docket.

But I wanted to call to your attention

-- the area we weren't able to cover you'll see

covered in the preceding slides after the TSA

presentation, and you'll see discussions related

to actions we're taking in the Office of Pipeline

Safety related to security.

And one -- well, a couple of the examples are just drawing the connection to doing things we can do that -- where there's a connection between security and safety, and with the expectation that the operators are covering that and addressing it to address the safety concern, the risk and integrity management plans in particular.

It's a threat, much like other threats like corrosion, so it needs to be addressed. And that's an area we're working on related to our protocols.

Another related area would be in the emergency response plan. There is already an expectation that operators are able to manually operate pipelines, but just -- in how they

address that in their emergency plans, but -their response to the incident, but then also in
the ability to recover and to operate under
manual operation, which is a bit tricky, we
found, with many operators out there because they
don't typically flex those plans.

So that's another area that we're looking to address going forward. But feel free to look at those as you see them posted. If you have any comments, feel free to reach back out to us.

Just in conclusion for the day, I just want to thank everyone for bearing with us on this long day. As you can see, we had a lot to cover. And there's still so much we didn't cover with you. We tried to provide a broad array of the activities that are going on at PHMSA and the Office of Pipeline Safety.

And I want to say it's quite impressive. There's a lot going on, and we have a fantastic team that's really helping us move forward with a number of initiatives that you've

seen described today. None of it's easy, but we really have a great team. And I just want to express appreciation, too, with all the stakeholders, from the public to the operators to my fellow government members in the federal government, state, working together as we move forward.

But just a lot of moving parts. There are other things we could have covered that perhaps will stay to another policy meeting down the road. So feel free to comment on the docket for those of you that have been here and have anything or additional input that you may have related to the topics that were covered today.

Tomorrow, we'll be covering the Standards Update Rule. We'll have a vote, or a series of votes, on that. That's the single topic we have for tomorrow, so we're looking forward to that.

I think that's about it. I wanted to thank everyone. I'll turn it back over to Madam Chair for closing the meeting. But thank you.

1	CHAIR BURMAN: Great. Thank you so
2	much for that. I look forward to seeing everyone
3	virtually tomorrow, 10:30 sharp. I think we'll
4	be opening it up around 10:00 so people can start
5	to get on.
6	And with that, I'm going to adjourn
7	the meeting. Thank you.
8	(Whereupon, the above-entitled matter
9	went off the record at 5:52 p.m.)
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a.m 1:10 5:2 37:8 abandoned 72:4 abate 109:4
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73:19 79:19 117:5
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accidental 100:20 accidents 40:5 146:14
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## <u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: Liquid and Gas Pipeline

Advisory Committee

Before: PHMSA

Date: 10-20-21

Place: teleconference

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

Court Reporter

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