

U.S. DEPARTMENT OF TRANSPORTATION
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PIPELINE AND HAZARDOUS MATERIALS
SAFETY ADMINISTRATION
+ + + + +
LIQUID PIPELINE ADVISORY COMMITTEE
TECHNICAL HAZARDOUS LIQUID PIPELINE
SAFETY STANDARDS COMMITTEE
+ + + + +
TUESDAY
DECEMBER 11, 2012

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The Advisory Committee met in the
Edison Room at the Alexandria Westin, 400
Courthouse Square, Alexandria, Virginia, at
1:00 p.m., Lula M. Ford, Committee
Chairperson, presiding.

PRESENT

LULA M. FORD, Committee Chairperson
JEFF WIESE, Associate Administrator for
Pipeline Safety

LANNY W. ARMSTRONG, Fire Services
Department, City of Pasadena

TODD DENTON, Phillips 66 Pipeline LLC

TIMOTHY C. FELT, Colonial Pipeline Company

RICHARD B. KUPREWICZ, Accufacts,
Incorporated

CHARLES LESNIAK, III, Watershed Protection
Department, City of Austin

CRAIG O. PIERSON, Marathon Pipe Line LLC

LARRY M. SHELTON, Sunoco Logistics

MASSOUD TAHAMTANI, Virginia State
Corporation Commission

CARL M. WEIMER, Pipeline Safety Trust

ALSO PRESENT

LINDA DAUGHERTY

SAM HALL

BLAINE KEENER

MAX KIEBA

PAT LANDON

T-A-B-L-E O-F C-O-N-T-E-N-T-S

	Page
Call to Order	11
Committee and Staff Introductions	11
Leak Detection and Valve Studies	13
Committee Discussion, Q and A	33
Oak Ridge National Laboratory Study for the requirements of automatic remotely controlled shutoff and hazardous liquid natural gas pipelines	42
Committee Discussion, Q and A	55
Cover Over Buried Pipelines	60
Emergency Response.	78
Committee Discussion, Q and A	94
Fitness for Service	98
Open Discussion	116
Wrap Up and Close	144

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

2 (1:03 p.m.)

3 MR. WIESE: Good afternoon. My
4 name's Jeff Wiese. I'm Associate
5 Administrator for Pipeline Safety at U.S.
6 DOT's Pipeline and Hazardous Materials Safety
7 Administration.

8 Welcome you to town. Not a bad
9 time to get here. Sorry Chuck, we let you
10 down. Chuck was praying for snow. And of
11 course, we were aghast at the thought of snow
12 in Washington.

13 If you've ever been here, trust
14 me, it's not worth it. I just got a couple if
15 informal remarks, if you'll allow me, and then
16 I'll turn it over to our Committee Chair, Lula
17 Ford.

18 Really, I just wanted to say today
19 is a separate session of the Liquid Committee.
20 We have a number of briefings set up for you.
21 You'll be able to see it inside of your
22 notebook, the agenda should be there.

1 We've asked a variety of our staff
2 to come forward and just provide updates for
3 you on a couple of things. This today is
4 really a Committee meeting.

5 So I don't really see this as a
6 public session for dialogue. But the
7 Committee is at liberty to ask anything they
8 want of anyone who's briefing them, myself or
9 anyone. We're happy to do that.

10 Tomorrow, we'll have two votes.
11 And at that time, we always provide an
12 opportunity for the public to go on record. So
13 that will be the opportunity for public
14 comment tomorrow.

15 I won't say a couple of these
16 things. I am pleased to be joined today by
17 the Honorable Lula Ford, Illinois Commerce
18 Commissioner.

19 Lula and I are friends, and she's
20 been the person who keeps me straight in these
21 meetings numerous times. So she's got a big
22 job ahead of her. I'm pleased, in particular,

1 to have her because I think this maybe is the
2 last time we have her.

3 CHAIRPERSON FORD: Correct.

4 MR. WIESE: We have a petition
5 going ahead to have her reappointed in
6 Illinois, but she's saying even if elected,
7 she won't serve.

8 CHAIRPERSON FORD: No. It's ten
9 years.

10 MR. WIESE: That's enough. I can
11 sympathize with that, trust me. Tomorrow, the
12 Honorable Collette Honorable will be here and
13 will be chairing the joint session.

14 And on Thursday, I believe I'm
15 asking Wayne Gardner to help us out to chair
16 the separate Gas Committee. We're going to go
17 around the table in a second, after I turn it
18 over to Lula and have people just sort of
19 introduce themselves, including our staff so
20 the Committee all knows who you're talking
21 with.

22 But I wanted to take a moment, if

1 you'll allow me, to just say a special hello
2 to people. No, they can introduce themselves
3 when they come on.

4 Start with Chuck Lesniak, City of
5 Austin. We've asked Chuck to join us. I've
6 known Chuck in a number of endeavors. And I
7 think we started out in a TRB Committee many
8 years ago.

9 Chuck is representing the National
10 League of Cities, which is really important,
11 I think to us to start drawing in the people
12 we have to deal with and do business with.

13 The cities, we have another
14 appointment pending for the National
15 Association of County Officials, I'm not at
16 liberty to say until it runs all the way
17 through.

18 But our goal is to connect better
19 with cities and counties, so I appreciate
20 Chuck coming, let him say a few words in a
21 second.

22 Tim Felt, another person I've

1 known for many years. Tim's President at
2 Colonial Pipeline. Probably the role that I
3 think of him most though is he's damage
4 prevention champion. Always has been. Been
5 on CGA, still on CGA.

6 He has to put up with Massoud and
7 myself and other people on that committee.
8 But thank you for joining us, Tim. Really
9 appreciate that.

10 I would say Lanny, but he's been
11 through this already. He's relatively new,
12 but he's fit in quite well.

13 So I would also be remiss if I
14 didn't, you know, just announce, I think most
15 of you probably know by now. We mentioned it
16 at the last meeting Denise Hamsher had
17 resigned and she's moving on to do other work.

18 Larry David from Magellan, as
19 well. And John Bresland who was in and out,
20 but he was with Chemical Safety Board. He has
21 left the Chemical Safety Board and gone into
22 private practice.

1 I think he's working at Texas A&M
2 now. And he's still active in the safety
3 arena. And John's a great guy. I think we'll
4 see more of him.

5 So anyway, I just wanted to make
6 those quick little announcements. I already
7 mentioned the bit about we'll do audience
8 participation when it comes to votes.

9 And I would ask anybody in the
10 public, if you're speaking, make sure your
11 remarks are brief. And I ask in particular
12 that you not stand up and repeat points that
13 have already been made.

14 The Committee is comprised of
15 pretty intelligent people. If they've heard
16 the point already, there is no value served in
17 just standing up and underscoring it.

18 So I would ask that you try to
19 inform the committee with new information.
20 It's important for everyone to understand that
21 all of these meetings are recorded. There is
22 a transcript that's made available.

1 I myself have been on the wrong
2 end of that transcript from time to time, so
3 I'll try to constrain what I say. We'll also
4 put all the presentations that we get and
5 give, we will put into our docket system at
6 regulations.gov.

7 For those of you who track these
8 sorts of things, and I'll give it to you
9 later, the Docket number is PHMSA-2009-0203.
10 It's easier to go to PHMSA's website for the
11 advisory committee, frankly, if that's what
12 you want. Or call one of us and we'll send it
13 to you.

14 Last couple of points, comfort and
15 safety. The most important thing for me
16 particularly tomorrow as we get into voting
17 time is there is a Starbucks downstairs
18 somewhere, I'm told really close by.

19 That will be good for coffee,
20 because as you know, government doesn't
21 believe in treating even those who volunteer
22 their time well. So I apologize for that, but

1 it is what it is.

2 The restrooms, as I recall from
3 being here before, out this way. And they're
4 very good. And I think you know by now that
5 fire exits are probably out and down through
6 these stairs. John will correct me, or Cam if
7 there was different guidance, okay?

8 And with that, that's what I have.
9 I will hand it over to Lula and she can call
10 the meeting to order.

11 CHAIRPERSON FORD: Yes, thank you.
12 Thank you, Jeff. Good morning, everyone.
13 This is a meeting of the Liquid Pipeline
14 Advisory Committee.

15 There is a quorum present, however
16 we will not be considering or acting on any
17 proposed rules. We'll be considering two at
18 the joint meeting tomorrow.

19 The meeting is officially called
20 to order. Before we begin, please turn off
21 your cell phones. If you wish to speak, turn
22 your tent card on its side.

1 State your name before you speak
2 for the record. If you make a statement from
3 the audience, please give a copy of your card
4 to Cheryl or to the court reporter.

5 Our first item on the agenda today
6 is leak detection. Oh, I'm sorry. I would
7 like to have introductions from all of our
8 members, starting on my right.

9 MR. ARMSTRONG: Lanny Armstrong,
10 City of Pasadena, representing the public.

11 MR. TAHAMTANI: Massoud Tahamtani,
12 Virginia State Corporation representing the
13 state regulators.

14 MR. DENTON: Todd Denton, Phillips
15 66 Pipeline, representing industry.

16 MR. FELT: Tim Felt, Colonial
17 Pipeline, representing industry.

18 MR. PIERSON: Craig Pierson,
19 Marathon Pipeline, industry.

20 MR. SHELTON: Larry Shelton from
21 Sunoco Logistics representing industry.

22 MR. KUPREWICZ: Rick Kuprewicz

1 representing the public.

2 MR. WEIMER: Carl Weimer with the
3 Pipeline Safety Trust representing the public.

4 MR. LESNIAK: Doug Lesniak, City
5 of Austin representing the public.

6 CHAIRPERSON FORD: Thank you. Now
7 we'll go to our agenda item one, Leak
8 Detection and Valve Studies. Max Kieba and
9 Pat Landon.

10 MR. KIEBA: Thank you, Chairwoman
11 Ford. Thank you, Jeff, thank you Committee.
12 My name is Max Kieba. I'm with PHMSA's
13 Pipeline Engineering and Research Division.

14 I will be specifically talking to
15 you right now about the Kiefner and Associates
16 A+ RTD, it might be pronounced Kai later for
17 leak detection study.

18 Right after me will be Pat Landon
19 talking about valves. This is the same
20 presentation for both committees. I'll do my
21 best to make sure it is focused on liquid
22 today.

1 A quick outline of my presentation
2 for leak detection study, I'll give you a
3 little bit of a background drivers behind the
4 study, talking about the Congressional
5 mandates, some NTSB recommendations.

6 Talk about some other PHMSA
7 initiatives we did this year, which were very
8 valuable in forming some discussion of what's
9 happening.

10 A little bit of the scope of the
11 study that the contractors did. A summary of
12 comments we received on a draft report and
13 some changes that had been made in a draft
14 report.

15 And also some observations,
16 general observations from the study. I think
17 most people know who Kiefner and Associates
18 are, but I just want to point out who the
19 specific team members were from Kiefner and
20 Associates, or subcontractors.

21 David Shaw was the lead author of
22 this report. A significant amount of

1 experience, 30 plus years. Engineering,
2 automation systems, simulation modeling.

3 Martin Phillips was the overall
4 project manager from Kiefner. And also other
5 co-authors and team members Ron Baker and
6 Christine Mayernik, particularly might be
7 familiar, some people, from the Baker study.
8 But they helped a lot with our incident
9 review.

10 And then also some other team
11 members. So a little bit of a background of
12 how this study was formed.

13 The Congressional mandate,
14 specifically Section 8, and this is
15 specifically Section 8A, talked about those
16 two items, particularly analysis of technical
17 limitations, the ability of system to detect
18 ruptures, small leaks, et cetera.

19 And also analysis of the
20 practicality of establishing, and that's where
21 Kiefner specifically looked at technical
22 elements, operational elements, economic

1 feasibility elements.

2 The two parts of both of those
3 that I highlighted and bolded, that was
4 primarily what Kiefner looked at from a
5 technical side.

6 To an extent, they looked at those
7 other areas. But we got a number of comments,
8 and pretty much agreed that the contractor
9 shouldn't be looking at all those aspects.
10 That needs to be done in the greater scope of
11 some of these discussions, which I think we
12 have done so far this year with some of these
13 other workshops we've had.

14 To an extent, though, in the
15 report they did go into those areas, but just
16 not explicitly enough to go as far as perhaps
17 some people would have liked them to.

18 And we also had, and this is more
19 on the gas side, but NTSB recommendation P-11-
20 10 talked about leak pinpointing for natural
21 gas transmission and distribution, that also
22 on the gas side.

1 I will also say why it wasn't
2 explicitly mentioned in the report.
3 Potentially relevant was a new one that came
4 out this year was P-12-7.

5 And that talked about team
6 training in a control room, which I would say
7 is certainly relevant to some of the work
8 that's going on in this study. And that one
9 is a particularly liquid focus, but talks
10 about control rooms in general.

11 So let's step back, look at some
12 of the other things we've done this year. In
13 March 27, 2012, we had the workshop improving
14 pipeline leak detection system effectiveness.

15 And this was really designed to
16 provide an open forum amongst all stakeholders
17 to exchange information about capabilities of
18 and understandably some challenges associated
19 with LDS, leak detection systems.

20 If anyone's interested, the
21 summary report is out there. A lot of the
22 information obtained through the workshop was

1 used to develop the scope of the study.

2 And actually, at about the same
3 time as that workshop, we had an advisory
4 notice that went out and some public comments
5 asking people for input on the scope of the
6 study.

7 Then, in the middle of July, July
8 18th, 19th, we had our Government Industry
9 Pipeline R&D forum. We had a number of
10 working groups.

11 One of them was specifically
12 focused on leak detection. Among the gaps
13 identified by that working group, again,
14 multiple stakeholders were involved.

15 Things like reducing false alarms,
16 leak detection system improvements needed in
17 general for new and existing systems for both
18 segments.

19 And the last one they pointed out
20 was what was considered smart system
21 development. But that was almost like a form
22 of a, almost like a health check of sorts

1 where you can put some sensors on the line
2 that notify someone that hey, by the way, you
3 might want to come and check on it.

4 So the contractor personnel were
5 also present at that workshop. They also, at
6 the time, provided a status of the study, and
7 also got input from some folks from the study,
8 as well. And again, the summary report is out
9 there.

10 And just recently, which is now
11 closed, we had an R&D solicitation. And these
12 are listed up here are some of the gaps we
13 ended up with.

14 And again, they kind of carried
15 over from our R&D forum. Among those, we do
16 see alarms of leak detection systems, in
17 general. We're talking about false alarms,
18 but I would say trying to reduce any alarm
19 flood.

20 And just some of the others again,
21 rolled in from our R&D forum. The
22 solicitation is now closed. White papers are

1 currently being reviewed.

2 I will say, on order of, I want to
3 say over 90 white papers we got, and well over
4 about 20 of those were leak detection related.
5 So good amount of proposals came in, which
6 we're currently reviewing.

7 And I want to step back a little
8 bit and just put LDS a little bit into
9 context, because I will say so many people are
10 focused so much on technology, and they want
11 the answer of what technology can do.

12 But I want to try to convey that
13 leak detection systems, in general, are
14 considered to include technology people,
15 operating environment, process and procedures.
16 Right?

17 And certainly when you add the
18 people element to it, it gets more complex.
19 But at the same time, it can be designed
20 properly, can be done properly of process and
21 procedures.

22 So in general, you know, in the

1 perspective of the study, they did take that
2 into consideration with leak detection study.

3 I also want to point out, as many
4 folks know, there are multiple layers of
5 defense in pipeline systems in general.
6 Certainly with LDS specifically.

7 Naturally, these are intended to
8 prevent incidents from occurring and reduce
9 the impact. But among others, people might be
10 familiar with the reason Swiss cheese model,
11 right?

12 As multiple things can happen and
13 if everything's lined up, then you have the
14 more significant incident.

15 And among others, with this whole
16 multiple layers of defense, I think it was Dr.
17 Rosekind said in a recent hearing that
18 focusing too much on the discreet elements
19 within a system without taking in context of
20 the overall system can be problematic.

21 So trying to do both is kind of
22 where you generally want to go. And in

1 general, that's kind of again where the study
2 looked at, as well.

3 So a little bit about the scope of
4 the study. Among others, they reviewed
5 pipeline incidents that had leak detection
6 aspects. The contractors chose to go between
7 January 1, 2010 and July 7, 2012.

8 They looked at technical
9 feasibility, and reviewing of installed and
10 currently available technologies. They looked
11 at some operational feasibility aspects,
12 economics, cost benefit analysis, which many
13 people obviously have differing opinions of
14 what that means.

15 But at least they presented some
16 scenarios. And also they did a standards
17 review, a study of existing LDS standards.
18 They also, as part of their study, they did
19 interview with operators and technology
20 suppliers.

21 Understanding it was a pretty
22 limited time period when they did this study,

1 so they did X amount of operators and
2 technology suppliers.

3 They certainly didn't interview
4 all of them. But from their perspective, was
5 a fair amount, a good representative sample.

6 So they had a draft report, not
7 explicitly on here, but we had a webinar
8 October 5th that we put out there. It was a
9 publicly webcasted webinar.

10 We had comments through October
11 26th. So we had comments that were received
12 via the website or email from nine commenters.
13 Many had multiple comments.

14 Total from all the comments
15 received, we got about over 100 individual
16 comments that were pretty much deemed
17 technical in nature, directly related to the
18 report and appropriate for some kind of
19 response.

20 Now many of these were similar to
21 one another. So these next slides I'll go
22 over are just a summary of some of those

1 comments and what resulted in a change.

2 And this link will be provided at
3 the end of this presentation, but all the
4 comments received by the comment deadline are
5 available in their entirety on the following
6 website.

7 So again, what I'm presenting you
8 is just a summary of those. But you can
9 certainly go on our public website to see them
10 verbatim.

11 So among the comments we got in,
12 among those just recommendations to, and I
13 will say this is a lost track, but it's a good
14 278 page report total.

15 So there are just recommendations
16 to bring up some observations up into the
17 executive summary, understanding that's
18 probably as far as many people will get. So
19 the contractors did agree, and they put that
20 summary table in there.

21 A number of comments raised issue
22 with some statements that were made, such as

1 many leak detection regulations in 49 CFR 195
2 apply equally well to gas.

3 There were a lot of concerns with
4 that statement just by itself. So the
5 contractors did agree, and they've moved the
6 specific statements.

7 Now elsewhere in the report, they
8 did leave some language in that talked about
9 some common elements that involve CPM, SCADA,
10 metering, et cetera, understanding there are
11 obviously differences between gas and liquid,
12 devil in the details, those sort of things.

13 There was also suggestions to
14 modify what was considered absolute language
15 such as immediate detection and changes things
16 like quickly. Things like refined products
17 are liquids inside and remain, change that to
18 usually.

19 And other fact statements that are
20 really more opinion statements from the
21 contractors. And they agreed and they made
22 those modifications.

1 There were some disagreement or
2 errors found on some of the data provided on
3 some of the case studies. I pointed to a
4 couple.

5 But in general, where it was
6 pretty clear there were data errors from what
7 was actually submitted, those were changed in
8 the report.

9 In some cases, for instance, there
10 might be changes made in the supplemental
11 report that occurred after the reporting
12 period. That was not changed because they
13 were pretty clear on we went with this time
14 period.

15 And overall, they made
16 clarifications that any review they did on the
17 incidents were based on data that was
18 submitted.

19 So they couldn't go into a greater
20 detail on, you know, confirming some of that
21 data was actually accurate or what really
22 happened, those kind of things. They just

1 couldn't go to that level.

2 Just some comments on missing
3 references from bibliographies, things like
4 that. Perhaps relevant to this committee,
5 it's not specifically on that table, but a
6 couple folks pointed out API 1155 that was
7 mentioned in the study was withdrawn.

8 And now relevant sections are
9 included in 1130, which that was fixed, as
10 well. This next one is more gas focused, so
11 I won't address too much with this committee.

12 But particularly when you get into
13 distribution systems, particularly something
14 that's not clearly on SCADA, and we're talking
15 just someone, you know, monitoring flow
16 gauges, things like that, are calling it in.

17 It isn't addressed in detail on a
18 report, and they acknowledge that and they
19 took it out. Or they at least acknowledged
20 what was and wasn't covered in the report.

21 So general observations from their
22 study. From the incident review portion based

1 on, again, these are based on reports
2 submitted, based on the actual data from that
3 time period.

4 If you go to the report, exact
5 percentages differ slightly. But in general,
6 for all types, emergency responder, member of
7 the public was more likely, and among all
8 those categories, the most likely to identify
9 a release. And they are air patrols,
10 operator, ground crew and contractors.

11 The next down is air patrol,
12 operator ground crew and contractors were more
13 likely to identify a release than a pipeline
14 controller control room.

15 And finally, the pipeline
16 controller control room was the least likely
17 to detect and identify the release. And
18 again, that's just straight from data.

19 Among the other observations,
20 recommended best practices for leak detection
21 for gas pipelines are a bit lacking, as are
22 best practices for external, sensor based leak

1 detection in general.

2 That applied to both liquid and
3 gas. That was an observation made by the
4 study. Unlike most other subsystem use on
5 pipeline, LDS does not have a nameplate or
6 rate of performance measures per se.

7 Particularly true of CPM where you
8 have computer software program configurations,
9 et cetera. Obviously you have vendors and
10 manufacturers that maybe provide some
11 information on their system.

12 But they all can contribute in
13 unpredictable ways to performance. And I will
14 say this, this element came up, too, in our
15 R&D forum saying it would be helpful to have
16 some kind of system in place to confirm what
17 kind of performance metrics are in place for
18 different systems.

19 In their opinion, there is no
20 technical reason why several different leak
21 detection methods cannot be implemented at the
22 same time.

1 In fact, a basic engineer
2 robustness test will call for at least two
3 methods that rely on different physical
4 principles. And again, in their opinion,
5 that's at least two.

6 Now there are other standards they
7 did where there's some regulations and
8 standards out there that go even many more
9 than two. But at least two is what they
10 observed.

11 And the idea there is if an
12 incident happens, ideally you want both
13 methods. Say okay something happened, there
14 was indeed a leak. Okay, you have some
15 verification there.

16 Now certainly, if there's a leak
17 that happens where perhaps one method sees and
18 another method doesn't, then you need some
19 kind of decision algorithm in place to help
20 confirm that.

21 Many performance measures
22 presented conflicting objectives. And this

1 gets into the whole notion of sensitivity
2 levels and prone to generating false alarms.
3 So there is certainly an issue there.

4 When you play too much with
5 sensitivity, you can create false alarms. At
6 the same time, right, false alarms, it goes
7 into your alarm methodology and your alarm
8 philosophy.

9 So somehow you want to figure out
10 what to do with false alarms. And again, that
11 was very consistent, I would say, with what
12 came out of R&D forum.

13 The general concept was is there a
14 way we can reduce false alarms in general so
15 that when the controller gets an alarm, is
16 there a way they can not second guess things
17 at all?

18 But is there a way that you can
19 confirm when they get an alarm, that it's
20 definitely determined to be a critical alarm,
21 and they know it's something they need to act
22 on?

1 A little bit about cost element,
2 but objectively the largest cost element in
3 our opinion is the investment in personnel who
4 understand manage plan, et cetera, leak
5 detection.

6 So it's not good enough just to
7 have a very sophisticated system if you don't
8 have the people that are properly trained on
9 it. So certainly those people are important.
10 They require some expertise that know the
11 system, know the technologies.

12 Most recommended practice for
13 internal LDS in their opinion contained
14 principles that are valuable for external.
15 Again, equivalent standards for external
16 systems, in their opinion, would be very
17 useful for the industry.

18 And certain standards and
19 regulations, they reviewed and expanded
20 several useful ways, including setting some
21 measurable performance standards for leak
22 detection.

1 And once again, the draft final
2 report and comments received are available out
3 there on the website. With that, is it
4 acceptable if we entertain questions for leaks
5 specifically? Any questions?

6 CHAIRPERSON FORD: Yes, questions
7 for our presenter? Massoud?

8 MR. TAHAMTANI: So Max, what's the
9 next step?

10 MR. KIEBA: Okay, well certainly
11 the next step for the Congressional mandate is
12 we have to report to Congress. According to
13 the mandate is no sooner than January 3rd.

14 Now, the NTSB recommendation,
15 usually there goes some additional
16 correspondence with them to address, to give
17 them an update of what we're doing with our
18 recommendations and have a dialogue of where
19 we're going with those.

20 MR. TAHAMTANI: Thank you.

21 MR. KIEBA: And for those that
22 aren't familiar with all the Act language,

1 there is an AB specific portion that talks
2 about rulemaking considerations.

3 But we're really not even allowed
4 to touch that until Congress gets the report.
5 They have a chance to review things like that.

6 So at least for leak detection
7 specifically, if you look at AB, that talks a
8 little bit more about the time periods
9 involved with that.

10 CHAIRPERSON FORD: Jeff?

11 MR. WIESE: Commissioner, allow me
12 just to expand for a second to say that what
13 we're presenting to you today I think Max has
14 made clear are the findings from the contract
15 and the contractor.

16 The Administration will have to
17 file a report, which will basically be a cover
18 letter, their sort of take on it. And you
19 know, I honestly couldn't sit here and tell
20 you what that letter's going to say.

21 It could be anything from just
22 here is, you know, the contractor's report on

1 it. And as Max said, sort of wait for any
2 implications for later.

3 Or you know, it could be an
4 endorsement or, anyway, just say that the
5 Administration has discretion to review it and
6 make a decision on that. So we're not in a
7 good spot to give you a good answer on that.

8 CHAIRPERSON FORD: Mr. Lesniak?
9 Mr. Denton, did you take your card down?
10 Okay. Mr. Lesniak?

11 MR. LESNIAK: I just wanted to
12 make sure I was clear about one of your
13 slides. One of the slides about identifying
14 a leak and the effectiveness of identifying a
15 leak.

16 Is what that slide was saying was
17 that the most effective in identifying leaks
18 or finding leaks was emergency first
19 responders and the public, then the pipeline
20 company --

21 MR. KIEBA: Oh, yes. The very
22 first slide. Sorry, Cameron, that would be

1 slide --

2 MR. LESNIAK: And then the control
3 room operator?

4 MR. KIEBA: Yes. So they went,
5 basically again, it was as was reported. Let
6 me get back to it, one second. Based on the
7 data reported, and you know, when our incident
8 reports, things like that, it says how was it
9 identified by who?

10 And in the large percentage of
11 cases, I'm sorry. I went right past it,
12 didn't I? Make sure we get to the right slide
13 that we're talking about.

14 MR. LESNIAK: That's basically
15 what it said.

16 MR. KIEBA: Yes. So --

17 MR. LESNIAK: And so I just wanted
18 to make sure that I wasn't hearing that
19 inversely because I was surprised, given the
20 enormous investment that the industry has put
21 in into leak detection, that to me that says
22 the systems don't work, or don't work very

1 well.

2 MR. WIESE: I wonder if I might
3 add some perspective, with your permission.

4 CHAIRPERSON FORD: Sure, yes.

5 MR. WIESE: The vast majority, or
6 my assumption and reacting the same way, the
7 vast majority of leaks that are reported to us
8 are small leaks.

9 They're probably well under the
10 threshold of any control room sort of
11 detection. That's a technology limitation.

12 Those small leaks, I think the
13 industry and the government have recognized
14 for years the value of the public being aware
15 because small leaks tend to be picked up more
16 by third parties or, you know, by patrols.

17 So I think if you look at a
18 statistical analysis, you would see the vast
19 majority of leaks are going to fall below that
20 threshold.

21 Now the control room is obviously
22 very useful when you have a large guillotine

1 break or very large release. And that's my
2 assumption for why that comes out that way.
3 I think it's less about they're effective then
4 how sensitive they can be.

5 MR. KIEBA: And certainly, it goes
6 back to, again, what is an LDS? And that
7 involves technology people and the
8 environment, things like that.

9 CHAIRPERSON FORD: Mr. Kuprewicz?

10 MR. KUPREWICZ: Yes, it looks like
11 you had a lot of work done in a very pressed
12 time. And I would like to see the final. I
13 didn't hear, when's the final report? Has it
14 been released yet, or is it coming out before
15 Congress?

16 MR. KIEBA: Jeff, you want to
17 answer that one on the release of the final
18 report?

19 MR. WIESE: I think the draft
20 final's out there now. You can look at it.
21 Honestly, I mean, I have sort of the same
22 question Massoud has.

1 The administration is going to
2 have to, and I'm not just making that up, it
3 hasn't gotten through them for review. So we
4 thought it was important to come before you
5 because you're here.

6 And just try to make sure you're
7 current with where we are now. But we haven't
8 even put anything into concurrence for the
9 administration to do it.

10 Hopefully we'll submit something
11 to the Hill, you know, since they only gave us
12 something, like, how many was it? Thirty
13 eight mandates? You know, we might be a month
14 late or something.

15 MALE PARTICIPANT: I see you got
16 one of them.

17 MR. WIESE: Yes, I want to check
18 that off the list as soon as we can.

19 CHAIRPERSON FORD: Mr. Denton?

20 MR. DENTON: I appreciate the
21 slide on the leak detection systems in context
22 because that's a good point that it's more

1 than technology. It is people.

2 And I think that's something that
3 industry's recognizing, that to the point of
4 who's detecting these links? Obviously want
5 to detect and stop any leak. But our first
6 focus is obviously on large leaks, ruptures,
7 that kind of thing.

8 The report seems fairly academic.
9 I think we would have liked to seen a little
10 more practical information as far as detecting
11 some of those smaller leaks and how we can
12 move forward with that.

13 But I did have a question for you
14 on the very last point on your last slide.
15 Could you expand on that, on the standards and
16 regulations?

17 MR. KIEBA: Sorry, observations?

18 MR. DENTON: Yes.

19 MR. KIEBA: This one they looked,
20 I can say, and it isn't again in a draft
21 report even, but they looked at CSA. They
22 also looked at German, I want to say it's

1 called TRFL.

2 And then the Germans, they
3 actually have, if I'm not mistaken, up to five
4 or six different methods or methodologies that
5 are used for a number of different scenarios.
6 Right?

7 They have a different methodology
8 for start up, shut downs, things like that.
9 They have other methodologies for this. They
10 use upwards of six.

11 In the contractor's opinion, CSA
12 has some more of those measurable performance
13 standards, it's at 662, it's in there. So
14 that, again, it's all based on the report.

15 But when they talk about standards
16 and regulations, that's kind of where they're
17 going with is either CSA has some stuff and
18 then also TRFL has others.

19 CHAIRPERSON FORD: Are there any
20 other questions for Mr. Kieba? Mr. Landon?

21 MR. KIEBA: Thank you, Chairman.

22 CHAIRPERSON FORD: Thank you.

1 MR. LANDON: Okay, good afternoon.
2 I would like to thank the Liquid Pipeline
3 Advisory Committee for allowing time for a
4 briefing on the Oak Ridge National Laboratory
5 Study for the requirements of automatic
6 remotely controlled shutoff and hazardous
7 liquid natural gas pipelines with respect to
8 this, public and environment.

9 It is quite a mouthful. I asked
10 for a longer title. In March 2012, PHMSA
11 contracted Oak Ridge National Laboratory, or
12 ORNL, to conduct the automatic shutdown and
13 remote control valve study that assessed the
14 effectiveness of blocked valve closures,
15 swiftness in mitigating the consequence of
16 natural and hazardous liquid transmission
17 pipeline releases on the public and
18 environment.

19 ORNL's study evaluates the
20 technical, operational and economic
21 feasibility and potential cost benefits of
22 installing ASVs and RCVs in newly constructed

1 and fully replaced transmission pipelines.

2 Who is Oak Ridge National
3 Laboratory? ORNL was established in 1943 as
4 an integral part of the Manhattan Project.
5 Today, ORNL is Department of Energy's largest
6 science and energy based laboratory who's
7 managed by a Limited Liability Partnership
8 between the University of Tennessee and
9 Battelle Memorial Institute, known as UT
10 Battelle.

11 Currently, it is staffed with
12 4,400 people. Within that staff, there are
13 1,600 scientists and engineers. It has an
14 annual budget of \$1.65 billion and home to
15 several of the worlds top super computers.

16 ORNL operates nine user facilities
17 that draw thousands of research scientists and
18 visitors each year to conduct research in the
19 following areas, building technology research
20 in the integration center, nanophase material
21 sciences, structural molecular biology, flux
22 isotope reactor, temperature material

1 laboratory, spallation neutron sources.

2 And the two that were essential to
3 this study, National Center for Computational
4 Science and the National Transportation
5 Research Center.

6 Background to ORNL's study. The
7 Congressional Mandate from the Pipeline Safety
8 Act, Regulatory Certainty and Job Creation Act
9 of 2001, Section 4 requires that Department of
10 Transportation required by regulation, the use
11 of automatic or remotely controlled shutoff
12 valves, or equivalent technology where it is
13 economically, technically, operationally
14 feasible on hazardous liquid and natural gas
15 transmission pipelines, newly constructed or
16 completely replaced.

17 Additionally, the act mandates the
18 government accountability office to conduct a
19 study on the ability of transmission pipeline
20 facility operators to respond to releases
21 within HCAs.

22 The GAO must consider the

1 swiftness of leak detection, pipeline shutdown
2 capabilities, the location of the nearest
3 personnel for response, as well as cost, risk
4 and benefits of installing ASVs and RCVs.

5 NTSB and its accident report from
6 the San Bruno accident made recommendation P-
7 11-11, and that PHMSA amend Title 49 CFR
8 192.935C to directly require that automatic
9 shutdown valves and remote control valves be
10 installed in high consequence areas, as well
11 as Class 3 and Class 4 locations and spaced at
12 intervals that consider population factors
13 listed in the regulations.

14 On March 28, 2012, the workshop,
15 understanding the application of automatic
16 control and remote control valves was
17 conducted to discuss the practical
18 considerations involved with spacing,
19 operating, maintaining automatic and remote
20 control valves by the public, federal and
21 state regulatory agencies, and transmission
22 line operators.

1 In this workshop, identified
2 constraints with the pull on these types of
3 systems on existing versus newly constructed
4 pipelines, and to collect input that would
5 help guide the Oak Ridge study.

6 Presentations, transcripts of the
7 workshop, and a summary report can be found on
8 the website. The scope of the Oak Ridge study
9 was published to the Federal Register for
10 comments, and these comments were used as well
11 by Oak Ridge to generate their study.

12 July 18th and 19th, 2012, the
13 Government Industry Pipeline Research and
14 Development forum was held. The working group
15 that worked on the automatic shutdown valve
16 determined that there was a potential
17 technology gap in the reliability of
18 operation.

19 Project is sought to study a more
20 accurate line break detection system to
21 minimize unintended valve closures. The R&D
22 forum report out can be found on the website,

1 as well as the announcements.

2 Solicitation is closed at this
3 point. And as Max has indicated, white papers
4 are being reviewed. On October 5th, 2012, Oak
5 Ridge presented in a webinar their draft for
6 the study.

7 Comments were received from
8 October 5th to October 26th. There were seven
9 commenters that submitted in the posted time
10 for comments.

11 Oak Ridge determined that there
12 were 42 technical comments, some of which
13 changed their study. Some of these comments
14 will be discussed in the next slide. And you
15 can see the draft report, as well as the
16 comments on the website.

17 Okay, so changes that Oak Ridge
18 made to the study based on the comments.
19 First was inadvertent valve closure was not
20 addressed in the Oak Ridge study. Oak Ridge
21 added a section to discuss these consequences.

22 Hazardous liquid case studies

1 seven and eight, numbers are inaccurate, as
2 well as the 90 minute shutdown for case study
3 AA was not a realistic number.

4 Oak Ridge went back and readjusted
5 their models to Section 194.105 to worst case
6 discharge methodology, as well as 105(b)(1)
7 for estimating release volume.

8 Use of the word leak should be
9 changed to rupture where the high rate of mass
10 release associated with pipeline failure are
11 appropriate. Oak Ridge clarified this in
12 their newest revision.

13 Use of the word detect should
14 expand beyond CPM and SCADA detection as Max
15 has discussed in his previous presentation.
16 So Oak Ridge, to address this, had also
17 changed it within their report.

18 Flow rate on hazardous liquid
19 lines can exceed normal pipeline flow
20 immediately following a rupture. As well, Oak
21 Ridge addressed this, and put it within their
22 analytical approach on the computational

1 models.

2 And then the final one that we'll
3 discuss today is the proposed hazard zone
4 models is based on extremely conservative and
5 inappropriate approach to pipeline outflow
6 estimates, and a fire radiation model that
7 ignores significant sources of conservatism
8 inherent to using a point source radiation
9 model.

10 Oak Ridge responded within the
11 report, as well as I'll read the gist of what
12 their adjustment was. The models used in the
13 Oak Ridge study to estimate pipeline outflow
14 and fire radiation for natural gas pipeline
15 releases were developed as tools for
16 identifying differences in release scenarios,
17 and for quantifying the effectiveness of
18 blocked valve closure, swiftness in mitigating
19 fire damage.

20 Simplifying assumptions and
21 limitations of the models used to estimate the
22 time dependent pipeline outflow and thermal

1 radiant tensivity resulting from the fire
2 produced by combustion of the release of
3 natural gas are now discussed in the study, or
4 have been.

5 These models are not intended to
6 be exact solution to these complex engineering
7 problems.

8 Okay, moving on to the actual
9 study itself. Oak Ridge categorized the
10 potential effects of unintended releases from
11 natural gas and hazardous liquid pipelines on
12 public environmental safety as personal
13 injuries and fatalities, property damage, and
14 environmental impacts.

15 The scope and the magnitude of
16 these effects depend on the type and the
17 amount of product released, the exact sequence
18 of events, and site specific factors such as
19 the separation and distance between an
20 individual or building in the release point.

21 Building type and construction,
22 terrain features and atmospheric conditions.

1 Oak Ridge study assessed the effectiveness of
2 blocked valve closure swiftness in mitigating
3 the consequences of natural gas and hazardous
4 liquid pipeline releases on the public and
5 environmental safety.

6 Rather, blocked valve closure was
7 evaluated on natural gas transmission lines
8 with an ignition of product, hazardous liquid
9 transmission lines with an the ignition of
10 product, and hazardous liquid transmission
11 lines without an ignition of the product.

12 The technical, operational and
13 economic feasibility and potential cost
14 benefits of ASVs and RCVs in newly constructed
15 and fully replaced transmission lines was
16 evaluated with the following.

17 Fire modeling was used to
18 establish metrics for analyzing response time
19 for transmission lines with ignition, and the
20 basic oil spill cost estimation model used by
21 the EPA was used to model oil spills for
22 hazardous liquid transmission lines without

1 ignition.

2 The scope of Oak Ridge study was
3 limited to only consider worst case pipeline
4 releases and HDAs involving guillotine breaks
5 rather than more common breaks such as
6 punctures and through wall cracks.

7 Although ignition of the release
8 product falling to rupture is not insured, Oak
9 Ridge's study modeled release scenarios for
10 natural gas and hazardous liquid transmission
11 lines, and the result in the immediate
12 ignition of the release product at the break
13 location.

14 Hypothetical pipeline release
15 studies show that ASVs and RCVs installed on
16 newly constructed and fully replaced gas
17 pipelines and liquid pipelines are
18 technically, operationally and economically
19 feasible, and provide a positive cost benefit.

20 However, blocked valve closure has
21 no effect on preventing pipeline failure or
22 stopping product that remains inside the

1 isolated pipeline segment from escaping to the
2 environment.

3 Decreasing the total volume of the
4 released product reduces the overall impact on
5 public and environmental safety. Installing
6 ASVs and RCVs can potentially be an effective
7 strategy to mitigate consequences of an
8 unintended pipe release.

9 Blocked valve closure swiftness is
10 most effective in mitigating damage resulting
11 from a pipeline release, and subsequent fire
12 when damaged pipeline segment is isolated and
13 thermal radiation produced by the fire
14 declines in time to enable emergency response
15 to safely start firefighting activities
16 immediately upon arrival.

17 If the damaged pipeline segment is
18 not isolated within 20 minutes after the
19 break, firefighting activities may evolve from
20 controlling fire damage to preventing fire
21 spread.

22 Positive effects of rapid blocked

1 valve closure are only realized through
2 combined efforts of pipeline operators and
3 emergency responders.

4 Similarly, the avoided cost of
5 socioeconomic and environmental damage for
6 hazardous liquid pipeline releases without
7 ignition increases as time require to isolate
8 the damaged pipeline segment decreases.

9 The modeling is dependent on a
10 case by case analysis of each pipeline system
11 due to the complexity of location, response
12 capabilities, pipeline configuration, and
13 resources.

14 Summarize. To summarize the
15 briefing, the Oak Ridge study was commissioned
16 in March 2012 by PHMSA to address
17 Congressional mandates, recommendations from
18 the NTSB, input from valve workshop and R&D
19 forum.

20 Transparency was maintained during
21 the development of the scope of the study
22 through public comment, and the final draft

1 was presented in a webinar and comments were
2 used by Oak Ridge to develop their final
3 study.

4 Oak Ridge's study indicates that
5 ASVs and RCVs installed on newly constructed
6 or fully replaced transmission pipelines are
7 operationally, technically, and economically
8 feasible and provide a positive cost benefit
9 on a case by case method. Thank you, and now
10 take questions.

11 CHAIRPERSON FORD: Thank you. Questions
12 for Mr. Landon? I would just like to comment
13 that last year, Jeff sent our Director
14 Quarterman into the Illinois Commerce
15 Commission along with our Congressman, Bobby
16 Rush, and presented to us.

17 So that was very beneficial for
18 our great State of Illinois. And thank you,
19 again, Jeff for that. I see Mr. Larry?

20 MR. SHELTON: Mr. Shelton, yes.
21 Thank you. And maybe you said this and I just
22 missed it. But first of all, I appreciate the

1 consideration of the comments that we
2 submitted during the comment period, and the
3 changes that are being made to the report.

4 But when do we see those changes,
5 or are they out there?

6 MR. LANDON: They haven't been
7 released. And as Jeff has indicated, we'll be
8 reporting to Congress with this report first.

9 MR. SHELTON: Okay, so we won't
10 have an opportunity to review the changes that
11 were made as a result of our comments? Is
12 that correct?

13 MR. WIESE: No, there's not a
14 second round of comments. But you know, it's
15 a contractual report, as I keep saying. It's
16 the contractor's views at this point.

17 The implications of what they say
18 in the study, the Administration would have to
19 study and decide how they want to own it. But
20 if there was a real implication, it would have
21 to go through rulemaking. Right?

22 So this committee would be heavily

1 involved in any sort of implications. But I
2 don't think it was our intent to go through
3 rounds of comments on that.

4 MR. SHELTON: Okay, thanks.

5 CHAIRPERSON FORD: Mr. Armstrong?

6 MR. ARMSTRONG: Yes, Lanny
7 Armstrong representing the public. One
8 question regarding the two year new
9 installation and/or replacement of an entire
10 line.

11 Was there any analysis done on
12 pipelines existing prior to that two year
13 limit?

14 MR. LANDON: Yes. Oak Ridge also
15 addressed the recommendation on the gas side,
16 but you could take their model and apply it to
17 the liquid, as well.

18 CHAIRPERSON FORD: Mr. Weimer?

19 MR. WEIMER: Just hoping for some
20 added clarity to Mr. Shelton's question. So
21 you gave a link there that had the draft final
22 report. But that draft final report isn't --

1 MR. LANDON: It's not the final
2 report.

3 MR. WEIMER: It isn't the final
4 report. And so is the final report not going
5 to be posted until it goes to Congress?

6 MR. LANDON: Correct.

7 CHAIRPERSON FORD: Mr. Lesniak?
8 And then Jeff.

9 MR. LESNIAK: And just to follow
10 on that, so the draft final that's out now, it
11 does not have the modifications based on the
12 comments included in it?

13 MR. LANDON: No.

14 MR. LESNIAK: Okay.

15 MR. WIESE: The only thing I
16 wanted to add on that one, but really more to
17 Lanny's question was there was a strange
18 Congressional mandate, if people will
19 remember.

20 They gave us the assignment to
21 look at new and major rehabilitated projects.
22 And then they really went back and asked the

1 Government Accountability Office, formerly the
2 Government Accounting Office I think it was,
3 I can never get their name right, GAO, to look
4 at that.

5 And GAO, but in a weird way,
6 they're looking at response times as much. So
7 we didn't have a mandate. I hope that it's
8 not confusing.

9 What we're trying to do today is
10 to move forward with closing out mandates
11 which were just to conduct a study and send it
12 to the Hill.

13 There are no immediate
14 implications on this. Those would certainly
15 be factored into any future rulemakings. But
16 the GAO, I know, is hoping to wrap up their
17 work by the end of the year.

18 I'm pretty sure they won't put
19 that out for public comment. You know, in
20 fact I think we can bet on that. But we will
21 see findings in advance.

22 I wouldn't be at liberty to

1 discuss them, but I think they'll be sort of
2 answering your question in their study, and
3 hopefully around the same time as we submit
4 ours up to the hill.

5 CHAIRPERSON FORD: Thank you. Any
6 other questions for Mr. Landon. Thank you,
7 Mr. Landon.

8 MR. LANDON: Thank you.

9 CHAIRPERSON FORD: We will now go
10 to Agenda item 2, Cover Over Buried Pipelines.
11 Blaine Keener?

12 MR. KEENER: Good afternoon,
13 everybody. My name's Blaine Keener. I'm the
14 National Field Coordinator for the Office of
15 Pipeline Safety within PHMSA.

16 And I have a brief presentation on
17 another mandate from the 2011 Act, Cover Over
18 Buried Pipelines. There's a lot more specific
19 and longer title to it that we'll get to on
20 the first slide.

21 See if it does it. To the right?
22 There we go. Section 28 of the 2011 Act

1 requires a study of hazardous liquid incidents
2 at inland bodies of water with a width more
3 than 100 feet from high water mark to high
4 water mark.

5 And the goal of the study is to
6 determine if the depth of cover over the
7 pipeline was a factor in any accidental
8 release of hazardous liquids.

9 So that's sort of a multi prong
10 mandate. That's the first prong with the
11 report on the results of that study was due a
12 year after enactment, which is coming up very
13 soon.

14 The second prong is that if the
15 report finds that depth of coverage is a
16 contributing factor in accidental release, the
17 next phase then is for PHMSA to review our
18 requirements for depth of cover.

19 And then within one year of the
20 report on the results of the study, we have to
21 determine if depth of cover requirements in
22 our regulations are sufficient.

1 So this is the first prong to do
2 the study and provide the results to Congress.
3 The second prong, then, would be to evaluate
4 our regulatory requirements related to depth
5 of cover to determine if they're sufficient.

6 One of the things we did in the
7 study was we tried to quantify what's out
8 there. We found 2,841 locations where
9 hazardous liquid pipelines cross inland bodies
10 of water.

11 And most of those, the body of
12 water was greater than or equal to 100 feet.
13 We grappled for a while with the high water
14 mark to high water mark concept.

15 And I believe that's in the
16 mandate because it's present in our
17 regulations for burial depth. Part of the
18 hazardous liquid regs dealing with burial
19 depths say that it has to be 48 inches deep if
20 it's crossing a water body that's more than
21 100 feet from high water mark to high water
22 mark.

1 Unfortunately, we could not find
2 any GIS data sets that gave us that high water
3 mark data. So we proceeded with the study for
4 all inland water crossings regardless of
5 width.

6 We found 20 hazardous liquids
7 accidents that occurred at inland water
8 crossings between '91 and 2012. We decided we
9 would just go ahead and do 20 years' worth.

10 The conclusion was that the
11 depletion of cover, sometimes in the waterway
12 and other times in new channels cut by flood
13 waters was a factor in 16 accidents.

14 And also from reading the
15 narratives on those reports, the dynamic and
16 unique nature of the rivers and the flood
17 plains that the pipelines were in was also a
18 factor in each of those accidents.

19 We looked a little bit at the
20 consequences of the accidents. The one thing
21 that stood out was the October 1994 flooding
22 of the San Jacinto River in Texas.

1 That accounted for 62 percent of
2 the gross spill volume for those 16 pipeline
3 failures where the depletion of cover was a
4 factor. We're still massaging this a little.

5 When you see this on a website
6 later, instead of saying half were from crude
7 oil pipelines, it's going to say that they
8 were fairly evenly distributed among crude oil
9 refined petroleum products and highly volatile
10 liquids.

11 That statement that half, that was
12 the 20 that occurred at the crossings, not the
13 16 that actually had depletion of cover as a
14 factor.

15 So when you look only at the 16
16 where depletion of cover was a factor, you
17 know, six were crude, five were refined
18 products, and five were HVLs.

19 So they're fairly evenly
20 distributed there. Fifty nine percent of the
21 gross spill volume was refined product
22 pipelines, and none of the 16 were from carbon

1 dioxide pipelines.

2 So then our next step is we hope
3 to get the report to Congress before the due
4 date. And since we have found that a
5 depletion of cover was a factor in 16
6 accidents in inland water body crossings, the
7 next step then will be to provide Congress
8 with an update on plans to ensure the
9 sufficiency of PHMSA regulations regarding
10 depth of cover.

11 And again, that would be due a
12 year after the report. And that's my
13 presentation.

14 CHAIRPERSON FORD: Thank you. Any
15 questions for Mr. Keenan? Mr. Weimer?

16 MR. WEIMER: Yes, just a couple of
17 questions. I was surprised that there was
18 only 2,800 crossings of inland waters.

19 Is there a definition of inland
20 waters that constrains how many water bodies
21 that might be? I'm assuming that doesn't
22 include every creek that a pipeline crosses.

1 MR. KEENER: I don't think so.
2 Our mapping folks used some USGS data sets and
3 another set from a government agency. So
4 basically, we tried to find the lines that we
5 considered were water bodies, and then
6 overlaid another set that told us how wide
7 they were.

8 And so yes, I don't believe it's
9 creeks and, you know, I'm not sure the exact
10 constraints. But you know, it has to be a
11 little bigger than just a creek to be
12 considered an inland water body.

13 MR. WEIMER: Okay. And second
14 question was as you move forward in the next
15 year looking at whether the regulations are
16 good enough, are you going to just focus on
17 water bodies, or are you going to focus on
18 depth of cover on all pipelines?

19 One of the things we hear over and
20 over again is how the depth of cover
21 regulations are not appropriate out in the
22 middle of nowhere, even.

1 MR. KEENER: Yes, the second part
2 of the mandate didn't restrict that study to
3 inland crossings of inland bodies of water. So
4 I imagine the sufficiency review would be
5 broader than just at water crossings.

6 MR. WEIMER: Great, thanks.

7 CHAIRPERSON FORD: Mr. Denton?

8 MR. DENTON: So there's not a
9 draft report out at this point on this?

10 MR. KEENER: No. It's not posted
11 anywhere.

12 MR. DENTON: Okay. So just a
13 comment or two. Obviously this was driven a
14 lot by the events in 2011. I think it's
15 important to note that those were very rare
16 and extreme.

17 And that you know, I think there's
18 been a lot of discussion around the, you know,
19 is four foot of cover sufficient under a water
20 crossing, a river crossing.

21 But given the current regulations,
22 the standards and RPs that are out there, even

1 the printed operator clause in the
2 regulations, and showed that last year,
3 multiple operators are out there replacing a
4 lot of river crossings.

5 So to come up with a prescriptive
6 standard on a depth, you know, may not be the
7 best use of resources or dollars. So
8 industry's spending a lot of money on this
9 situation.

10 You know, a new river crossing is
11 very expensive, but a failure in a river is
12 obviously more so. And that's been shown in
13 recent instances.

14 So we're already incentivized to
15 make sure that we take care of those things.
16 But secondly, you don't want to go spend
17 dollars where you don't have to. So you know,
18 there needs to be some risk based analysis
19 associated with that. Thanks.

20 CHAIRPERSON FORD: Mr. Pierson?

21 MR. PIERSON: Going to the first
22 slide, I missed the 2,800 and 72 population.

1 Was that 100 foot waterways, but not
2 respecting the high water mark?

3 MR. KEENER: Yes, we were unable
4 to do anything from a data perspective with
5 high water mark to high water mark. What we
6 did when we essentially created a layer of
7 inland water bodies, and then overlaid that
8 with our liquid pipelines.

9 So as you can see, most of the
10 locations had a 100 foot or greater width that
11 were identified when we overlaid those two
12 data sets. So another reason to lead me to
13 believe that creeks were not included.

14 MR. PIERSON: Okay. I'll continue
15 Mr. Denton's comment that the Yellowstone
16 Rivers got a lot of attention, a lot of
17 operators not waiting to be told what they
18 needed to go look at.

19 And it's a lot of them go above
20 and beyond what's required today, but still
21 looking at what more, I'm trying to balance
22 the risk of it is a tough thing to do. But

1 we're looking at it, working on it.

2 CHAIRPERSON FORD: Thank you. Mr.
3 Lesniak?

4 MR. LESNIAK: So this study was
5 really just restricted to what's the universe
6 out there, what kind of accidents have
7 occurred and whether or not cover was
8 involved?

9 And it wasn't a identify what the
10 best practices are, what the current state of
11 the art is, any of that? It was really just
12 is this a problem out there today, as opposed
13 to what's the industry best practices, what
14 are other options?

15 MR. KEENER: It would be the
16 former. It was just has depth of cover been
17 a factor in any, and I think the word any is
18 actually in there, accidental release of
19 hazardous liquids at crossings of inland water
20 bodies.

21 So it's pretty straightforward at
22 first. The next prong, if you will, the

1 sufficiency review will have to get into more
2 of those issues of best practices and are our
3 regulations sound regarding depth of cover.

4 So this was a pretty cut and dry
5 to fairly simple part of the mandate.

6 CHAIRPERSON FORD: Jeff?

7 MR. WIESE: I just wanted to add
8 some perspective because I think, again, I
9 know we pushed three things at you really
10 fast. They're not meant to do much more than
11 let you know where we are with some
12 Congressional mandates.

13 Where as I said I think between
14 mandates and recommendations now, we're up to
15 78 or 76. And this committee gets exposed to
16 all of them.

17 So these are not rulemaking
18 activities that we're going through now.
19 They're things that will be out there that are
20 meant to inform the broader debate, get a
21 public debate going on these issues.

22 But clearly, any implications will

1 follow through on the rulemaking. On this
2 one, you know, just based on personal
3 experience, and it's only 14 of those 20
4 years, but what we see a lot is record
5 flooding.

6 During record flooding, you'll see
7 a whole series of these things happen. You
8 know, and clearly, for the reasons that Blaine
9 has pointed out, depletion of cover, sometimes
10 that happened pretty fast.

11 In some cases, it's debris running
12 down a river that, you know, under normal
13 circumstances, you would never anticipate the
14 scour and then the debris just almost
15 puncturing a line.

16 Pretty amazing, you know, the
17 amount that some of those record floods took
18 off of the top of these lines. So yes, just
19 wanted to make clear, these are not meant to
20 be anything more than meet the mandate.

21 They say study and tell us if this
22 happens very often, and if so, what kind of

1 consequences. We then have to go through, you
2 know, another entire process to consider any
3 of the implications of these things.

4 So I know it feels kind of
5 unfulfilled to have a study dumped in front of
6 you and, well what does that mean, you know.
7 But it is what it is.

8 CHAIRPERSON FORD: Mr. Kuprewicz?

9 MR. KUPREWICZ: Yes, as a
10 representative of the public, our perspective
11 is this is kind of a starting process that,
12 sort of question by Congress, kind of a data
13 validation.

14 The public isn't looking for
15 perfection at this stage of the game. The
16 long history of the Advisory Committee,
17 there's a process that will take to rulemaking
18 and right or wrong.

19 You could think of sausage
20 sometimes, but there tends to be a level of
21 understanding and communication. So we just
22 see this as a starting process from our

1 perspective.

2 And I think it's a good start. I
3 think there's a lot of rational process here.
4 There's a lot of work that was done in the
5 last year, and so I want to compliment you on
6 that perspective.

7 Don't know what the final reports
8 are going to look like. May not even agree
9 with them all. But that's not necessarily
10 what we're trying to do here at this start of
11 a very important process.

12 And some of these issues will be
13 more important than others. Thank you.

14 CHAIRPERSON FORD: Lesniak?

15 MR. LESNIAK: It would be
16 interesting as a follow on to this study, you
17 know, I know from my own personal experience
18 in central Texas is the industry spends a lot
19 of time looking at their crossings, at their
20 stream crossings and fairly frequently in our
21 area, lowering their lines.

22 And it would be interesting,

1 because this is just looking at accidents.
2 But one of the things that might be more
3 telling is the industry does a good job of
4 paying attention to their lines and
5 identifying those.

6 It would be interesting to find
7 out how often lines are installed that later
8 on have to be lowered, because what that says
9 to me is that the initial design probably did
10 not account for the potential for erosion at
11 that stream crossing.

12 You know, where I work in the City
13 of Austin, we've done an enormous amount of
14 research on erosion hazard zones, both
15 horizontal and vertical erosion.

16 And the state of that art has
17 advanced significantly in the last five to ten
18 years in how you can predict with a lot of
19 accuracy the rate of vertical and horizontal
20 erosion.

21 And I would be interested in
22 seeing PHMSA include some of that and share

1 that with the industry down the road.

2 CHAIRPERSON FORD: Thank you.

3 Jeff?

4 MR. WIESE: No, I just want to
5 say, I think that's half the purpose of these
6 committees is to, you know, a lot of people
7 here are sort of on the cutting edge of being
8 informed on issues from different
9 perspectives.

10 So it is the point of the
11 committee. And I'll go back to you and say
12 anything that you want to provide to the
13 committee we can easily do that.

14 We can post them in the dockets,
15 happy to do that. I suspect we'll be talking
16 about this for quite a while. And I know that
17 you know this.

18 I mean, we have a complex picture.
19 We have some lines that have been in place for
20 a long time, and there haven't been a lot of
21 change. Then you hit record flooding, and
22 that changes things.

1 But then you have other situations
2 that are relatively new. You know, if that's
3 true, you would think that the modeling would
4 be a lot better.

5 I thought where you were going to
6 go with that when I was trying to figure out
7 how to get there was I think that's probably
8 right. The industry proactively probably does
9 address a lot of these issues.

10 We see those, too in our reports
11 from operators who have said hey, the line was
12 exposed. You know, they're out there, they're
13 working on the line.

14 I have no idea how many times they
15 proactively get out there and address that.
16 Honestly, that would go back to the industry
17 to say at some point.

18 I think we'll have that debate as
19 we talk about implications of depth of cover
20 going forward. But thank you.

21 CHAIRPERSON FORD: If there are no
22 other questions for Mr. Keener, we'll go to

1 break for how long, Jeff?

2 MR. WIESE: Until when? Okay,
3 2:30.

4 CHAIRPERSON FORD: 2:30, thank
5 you.

6 (Whereupon, the foregoing matter
7 went off the record at 2:08 p.m. and went back
8 on the record at 2:30 p.m.)

9 CHAIRPERSON FORD: Now that we've
10 reconvened, we will start with Agenda item 3,
11 Emergency Response, Sam Hall. Sam?

12 MR. HALL: Thank you. Good
13 afternoon. I'm Sam Hall. I work in program
14 development within the Office of Pipeline
15 Safety.

16 And I'm here today to provide some
17 information about our efforts to better engage
18 with the emergency response community and to
19 improve pipeline emergency response.

20 Just a minute here. I need to
21 wait for the, okay there we go. The
22 presentation that I'm going to give today is

1 truly for your information.

2 And it's not going to encompass
3 everything that is happening in the emergency
4 response world, that is the pipeline emergency
5 response world.

6 I'm trying to cover some of the
7 key things that we are focused on within
8 PHMSA. The industry is certainly extremely
9 active in emergency response efforts, and so
10 would welcome any discussion on what's
11 happening outside of PHMSA.

12 Our goals within PHMSA are listed
13 here. We want to reduce the consequences of
14 pipeline failures by strengthening the
15 capabilities of local emergency responders by
16 institutionalizing pipeline awareness within
17 the emergency response community.

18 When I use the word
19 institutionalize, I think I might be the only
20 person who uses that consistently. But what
21 I am saying with that word is that we want to
22 create solutions that make pipelines a matter

1 of course for emergency responders, just as
2 other issues that are important to emergency
3 responders are a matter of course, structure
4 fires, vehicle accidents, roll overs.

5 These are matters of course. And
6 so pipelines need to be institutionalized in
7 the same way. So to accomplish this goal,
8 we've undertaken a variety of initiatives and
9 activities.

10 The first is to educate ourselves
11 and to educate the emergency response
12 community by hosting and participating in a
13 number of forums and meetings. I'll talk
14 about some of those.

15 We recognize that we can't achieve
16 our goals without partnerships. The emergency
17 response community is huge. And the issues
18 that face emergency responders on a daily
19 basis are many.

20 And we need to build partnerships
21 with people who deal with these issues on a
22 regular basis.

1 We're also actively communicating
2 with the emergency response community through
3 presentations at conferences, we're hosting
4 booths, we're publishing articles in emergency
5 response trade publications.

6 And we're also creating or
7 enhancing pipeline emergency response
8 resources. So I'm going to walk through each
9 of these in turn.

10 Educating ourselves and the
11 emergency response community. We've either
12 hosted or attended multiple events in the past
13 year or year and a half.

14 The first of these was a meeting
15 at Spectra Energy. It was an INGAA sponsored
16 event that focused on pipeline emergency
17 response. That was in September of 2011. A
18 lot of great lessons from that.

19 PHMSA hosted an emergency response
20 forum in December of 2011 at the DOT
21 headquarters. And just recently, this past
22 October, we, with the help of the folks who

1 organized the hot zone conference down in
2 Houston hosted a pipeline emergency response
3 focus group.

4 I've listed two key lessons that
5 we've learned through all this. This is by no
6 means comprehensive, but the first of these is
7 to leverage existing resources as we try to
8 tackle the many problems that face us in
9 pipeline emergency response.

10 That is, there's no need to
11 reinvent the wheel. We don't need to create
12 new institutions, new solutions. We need to
13 take what exists and modify it to better serve
14 pipeline emergency response.

15 Other industries have certainly
16 created wonderful models for doing this. The
17 chemical industry is a good example.

18 The second key lesson is that we
19 need to ensure continuity and sustainability
20 of our solutions. That's the institutionalize
21 that I keep using.

22 We need to make sure that what we

1 come up with is institutionalized and becomes
2 a matter of course. I mentioned that we're
3 building partnerships to try to achieve our
4 goals.

5 The longest standing partnership
6 that PHMSA has with the emergency response
7 community is with the National Association of
8 State Fire Marshals.

9 We've had an ongoing partnership
10 with the Fire Marshals since the early 2000's.
11 And the key deliverable from that partnership
12 was the pipeline emergency's training
13 curriculum.

14 You can view that training
15 curriculum at www.pipelineemergencies.com.
16 It's an extremely comprehensive training
17 curriculum. It talks about many aspects of
18 pipeline operations, pipeline emergency
19 response and so forth.

20 We've gotten some great feedback
21 on that program. Have heard that it could be
22 broken down into smaller bite size pieces,

1 that the training could be broken down to be
2 more applicable to certain segments of the
3 emergency response community and so forth.

4 So that's a great resource that's
5 out there, and I think some good things can
6 come from that in the future.

7 The second partnership I wanted to
8 mention is one with an organization called
9 TRANSCAER. TRANSCAER is an acronym that
10 stands for Transportation Community Awareness
11 and Emergency Response.

12 These folks are very active, and
13 have been traditionally very active in other
14 modes of transportation of hazardous
15 materials, rail, tanker truck.

16 And the focus is on training
17 emergency responders at the local level. Tim
18 Butters, our Deputy Administrator was active
19 in TRANSCAER in a former career role and
20 introduced us to TRANSCAER.

21 And we have become partner
22 representatives on the TRANSCAER National Task

1 Group, and we are actively seeking
2 representatives from the pipeline industry to
3 get engaged with TRANSCAER and start focusing
4 some of the TRANSCAER training materials on
5 pipeline transportation.

6 A relatively new idea has come
7 down from leadership, and that is a potential
8 partnership with the Emergency Management
9 Institute and the National Fire Academy to
10 approach pipeline hazard mitigation from a top
11 down perspective, try to encourage state
12 emergency management offices and local
13 emergency management offices to address the
14 hazards inherent in pipeline transportation
15 and their emergency management plans.

16 We've stood up a pipeline
17 emergency response working group. I've got a
18 slide on that that I would like to cover.

19 And then the last bullet here is
20 we've conducted a pilot in the state of
21 Georgia to try to improve training for
22 emergency responders there. And we've also

1 done a pilot in the state of Virginia with the
2 Virginia Department of Emergency Management.

3 Briefly on the Pipeline Emergency
4 Response working group. This is a working
5 group that we stood up in June of this year.
6 It's about six months old now.

7 We have spend quite a bit of our
8 time trying to identify how we can best
9 contribute to solving some of the problems
10 that we want to solve.

11 The first thing we want to be is a
12 platform and a voice for the pipeline industry
13 and emergency responders on a strategic level.

14 We want to serve as a platform for
15 collaboration on identifying and facilitating
16 solutions and pipeline emergency response. We
17 want to develop an inventory of existing
18 resources.

19 Again, we want to leverage those
20 existing resources as best we can. We don't
21 want to create something new. So in order to
22 know what those resources are, we want to

1 create an inventory of them.

2 And of course the idea being,
3 again, to institutionalize pipelines in the
4 community. And we need to address gaps in
5 existing resources through partnerships.

6 I apologize for the size of the
7 print on this graph. But here are the members
8 of the emergency response working group.

9 Two of the members are also
10 members of our advisory committees, Lanny
11 Armstrong who is at the table with us here,
12 Fire Chief out of Pasadena, Texas and Jerry
13 Rosendahl, who is the current head of NASFM.

14 Larry Halmerson, who's also
15 bolded, he's number 12 there, he's with
16 Williams and also a representative of INGAA,
17 has just announced that he's retiring.

18 And so unfortunately he was one of
19 the chairs of this working group and we're sad
20 to see him go. He's got some great ideas and
21 has been a tremendous help.

22 You can see that the working group

1 is heavily populated by folks from the
2 emergency response community, and also the
3 pipeline industry, which I think is a real
4 asset.

5 The Georgia pilot. I have to
6 confess, I have not been heavily engaged in
7 the Georgia pilot project, so I don't have
8 much to say about it.

9 It is being led by our southern
10 region. It's a working group very similar to
11 our national working group of pipeline
12 operators, emergency responders and
13 regulators.

14 And their goals are really to
15 focus on effective communication and training
16 for emergency responders at the local level.
17 They want to create a model that can be
18 transferrable to other states.

19 I think they've had some pretty
20 good success to date, and I think I should be
21 able to share some more information about that
22 if I'm lucky enough to get on the agenda at

1 the next set of advisory committee meetings.
2 I think we may be able to talk some more about
3 the successes in Georgia.

4 Outreach to the emergency response
5 community. We're going through the regular
6 channels here to reach out to emergency
7 responders.

8 We've made presentations and
9 hosted booths at multiple conferences, big
10 national conferences around the country, the
11 Hot Zone Conference in Houston, the
12 International Association of Fire Chiefs
13 HAZMAT Conference in Baltimore, the FDIC
14 Conference in Indianapolis, Continuing
15 Challenge in Sacramento, and the Midwest
16 HAZMAT Conference.

17 We've also published several
18 articles in some fire service publications
19 that might be of interest to you.

20 At the end of this presentation,
21 I'm going to put up a slide that has a URL for
22 a website that we've developed that highlights

1 all of the things that I've talked about and
2 gives you links to some of the publications
3 we've written and some of the articles we've
4 written for publications and some of these
5 other things.

6 This, I believe, is my last slide,
7 and it's a doosey. It really lists a lot of
8 the resources that we think are relevant to
9 pipeline emergency response.

10 And I think in each of these, we
11 have some opportunity to either improve or
12 update or communicate better about how these
13 resources might serve emergency responders
14 better.

15 The first is obviously the
16 National Pipeline Mapping System. One thing
17 we've found is that emergency responders in
18 many communities are not aware of pipelines in
19 their communities.

20 They're simply not aware of where
21 they are, what's in them, who operates them,
22 those kinds of things. So the National

1 Pipeline Mapping System is a great resource
2 for just understanding where the major
3 transmission pipelines are across the country.

4 Some gaps we've identified in that
5 system are that we don't have emergency
6 contact information for operators there. You
7 know, and there are some other gaps that could
8 be filled to make it a better resource for
9 emergency responders.

10 The pipeline emergency's training
11 curriculum I mentioned, a very comprehensive
12 training curriculum. The Emergency Response
13 Guidebook was recently updated for 2012 and
14 has expanded pipeline pages now.

15 I think there's a four page spread
16 in the white pages that addresses things like
17 how to identify leaks, what to do when you
18 come upon a major pipeline release, those
19 kinds of things. Very simplistic how to's on
20 dealing with a pipeline emergency.

21 The Pipelines and Informed
22 Planning Alliance also has some recommended

1 practices that address hazard mitigation,
2 pipeline hazard mitigation at the local level,
3 especially in terms of land use development.

4 Call Before You Dig, obviously,
5 one of the best ways to prevent a pipeline
6 emergency in the first place is to not impact
7 them with a backhoe or not dig into the
8 pipelines.

9 Our Technical Assistance Grants
10 program can offer some assistance to
11 communities to deal with technical issues
12 around pipeline safety to include emergency
13 response issues.

14 Of course, our community
15 assistance and technical services program
16 managers are all available to help deal with
17 issues around emergency response, pipeline
18 emergency response. And our websites, of
19 course, offer some good information.

20 The last bullet here is on a
21 particular project that is being funded by the
22 Hazardous Materials Cooperative Research

1 Program. That's a PHMSA grant program.

2 And last year, we provided
3 approximately \$300,000 to a university to
4 conduct a study and to ultimately develop a
5 guide that will help emergency responders and
6 pipeline operators communicate.

7 What to communicate, how to
8 communicate and how to ensure that the
9 information that is communicated gets to the
10 proper people within the emergency response
11 community so that we can avoid situations in
12 the future where emergency responders simply
13 weren't aware of pipelines in their
14 communities and didn't know what to do.

15 That's right, paid for by PHMSA
16 HAZMAT. The last slide here, this is my
17 contact information. Feel free to contact me
18 any time.

19 The last URL there, probably the
20 easiest way to get to that is to simply go to
21 Google and Google pipeline awareness or PHMSA
22 pipeline awareness, and you can very easily

1 get to our page and link to emergency
2 response.

3 It's really an index of all the
4 things that I've just spoken about, links to
5 pipeline emergencies, and more information
6 about all the programs that I just discussed.

7 CHAIRPERSON FORD: Thank you, Mr.
8 Hall. Mr. Wiese?

9 MR. WIESE: Just wondered, do you
10 want to say anything about, you had sent a
11 press release to me today.

12 MR. HALL: Yes, I'll mention that
13 the National Emergency Numbers Association,
14 NENA, and I don't know very much about it so
15 I apologize, but maybe just to put a bug in
16 your ear, they just created an application
17 that allows pipeline operators to directly
18 communicate with the Public Safety Answering
19 Points, PSAPs or 911 dispatch offices in the
20 communities that they're pipelines traverse.

21 As I understand it, it's a fee
22 service. But you can very quickly directly

1 contact the Public Safety Answering Points in
2 communities if you suspect a pipeline break,
3 which of course was the subject of a recent
4 advisory bulletin from PHMSA.

5 That's as much as I know about it.
6 I saw their press release. It's on their
7 website, NENA.org, and I believe it's under
8 the press link.

9 MR. WIESE: I would just add, if I
10 could?

11 CHAIRPERSON FORD: Sure.

12 MR. WIESE: You know, as Sam
13 eluded, there's a lot more going on than we've
14 had time to kind of skim over the surface.

15 I know Tim's probably involved,
16 for example. Colonial is in the Georgia
17 pilot. You know, Massoud's very aware of
18 what's happening in Virginia.

19 So welcome any of the committee
20 members talking about it. I'll just say the
21 reason I highlighted that NENA and the 911 is
22 having Tim Butters really has been very

1 helpful to engage with the emergency response
2 community.

3 You know, he's been engaged with
4 that community for most of his career in one
5 way or another. So he knew a lot of people
6 that we didn't know and was able to open doors
7 that we're now having really good
8 conversation.

9 So been immensely invaluable on
10 that. And one of the things that I think the
11 NTSB was interested, and so were we, I mean,
12 is how do we communicate more effectively with
13 the 911 centers when we know that something
14 has happened?

15 We have a major incident from the
16 summer of 2010 in which, you know, it would
17 have been extremely helpful for the 911 center
18 to know that an operator was having problems
19 with their line in that area because they were
20 getting other calls that they could have
21 pieced together very quickly, you know, to
22 really and the operator would tell you if they

1 were here.

2 They would say I wish to hell I
3 would have had that information sooner. So
4 that a part of this initiative of drawing the
5 911 centers in closer is to make sure they're
6 better informed and they can help.

7 You know, if they gather two or
8 three pieces of information and then can
9 communicate with the operator, I think it will
10 be in everyone's, including the operator's,
11 best interests.

12 So we'll keep exploring the
13 opportunity to improve the relationships,
14 connections. That was another learning PSAPs,
15 the public, it's not always 911.

16 I mean Lanny would probably laugh
17 at us. But instead of always 911, it's the
18 Public Service Access Point, yes, Public
19 Safety Access Point.

20 So any rate, yes, there's a lot
21 going on. Sam's done great work in there. We
22 didn't show you, we sent him into fire school

1 and had him gear up and learn that it might
2 not be as easy as it looks sometimes to wear
3 all that gear and have to respond, too.

4 MR. HALL: Great.

5 MR. WIESE: Thanks.

6 CHAIRPERSON FORD: Questions for
7 Mr. Hall? Thank you, Mr. Hall.

8 MR. HALL: Thank you.

9 CHAIRPERSON FORD: You did a fine
10 job.

11 MR. HALL: You bet.

12 CHAIRPERSON FORD: Our next Agenda
13 item is item 4, Fitness for Service. Linda
14 Daugherty and the panel? Linda will introduce
15 the panel.

16 MS. DAUGHERTY: Good afternoon.
17 This is Linda Daugherty, and it's good to see
18 you all. Thank you for coming up in the
19 middle of December.

20 Someone pointed out to me we
21 should all be off doing our Christmas and
22 holiday purchases right now. But appreciate

1 you coming up here.

2 You know, we looked at issues that
3 are facing the American public in regard to
4 pipeline infrastructure and pipeline safety
5 issues in general.

6 We know we've got a whole lot of
7 work ahead of us. We have not only an immense
8 growth in the pipeline infrastructure related
9 to unconventional shells, the oil and gas.

10 We've got new pipelines going in
11 everywhere, many of those which are not
12 currently regulated by PHMSA, but yet they do
13 pose some safety issues we need to consider.

14 But we also have a whole lot of
15 existing pipeline infrastructure that is
16 getting older. That doesn't make it bad, old
17 is not bad. I think we clarified that a
18 couple meetings ago.

19 But sometimes there are challenges
20 that are presented by pipelines that were
21 built 50, 60, 70, 80, 90 years ago. They were
22 built out of different construction materials.

1 They were perhaps constructed
2 using different standards. Anyway, there's a
3 lot of challenges associated with maintaining
4 those facilities and making sure that they can
5 operate safely today and for the next
6 generation.

7 So as you know, you know, the last
8 few years we've had a lot of accidents. And
9 that generated a lot of concern. You know, we
10 had the Secretary issuing a Call to Action a
11 couple of years ago and said hey, we need to
12 take a hard look at some of our pipeline
13 infrastructure and requalify or replace some
14 pieces of pipe, make sure it's good to go.

15 You know, make sure the next
16 generation can thrive with a good, sound
17 energy infrastructure. On the other hand, you
18 also have the administration saying hey,
19 there's a whole lot of work out there that
20 needs to be done, and put forth a budget
21 request which proposed some significant
22 increases for PHMSA and our oversight ability

1 to take on some of these challenges and
2 provide safety oversight.

3 And then you also have Congress
4 and their, let's see, I actually have the
5 count Jeff. We have Congress gave us 37
6 mandates on January 3rd.

7 And the OIG as of now have given
8 us nine recommendations. And the GAO
9 currently have two recommendations. And then
10 we currently have 26 open NTSB recommendations
11 to PHMSA, plus six directed to the Secretary.

12 So what that means is we got a
13 whole lot of work ahead of us. We got a lot
14 of challenges. And there are no absolute
15 solutions on how we address every one of
16 these.

17 These are not easy answers. These
18 aren't just oh, well we'll just issue a
19 regulation and fix this. They require fast
20 removal of a certain type of pipe or a certain
21 correction.

22 They're issues that have to be

1 addressed sometimes individually, sometimes
2 uniquely. But they need to be addressed for
3 safety.

4 So we started trying to figure out
5 how we could tackle some of these more complex
6 issues and realized that there isn't a single
7 solution. Not to some of them.

8 And sometimes, the solution may be
9 a way off. We can't just say fix everything
10 immediately. It may take a decade to get
11 there.

12 But in the intermediate time,
13 between now and when we have the perfect
14 solution, we have to know that those pipelines
15 can operate safely. We have to know that
16 they're fit for service.

17 So we did some research trying to
18 understand what the term Fitness for Service
19 actually means and how it can be applied to
20 assure that we have safe operating systems.

21 And so for this meeting we ask
22 members Larry Shelton to speak to us a little

1 bit about what a fitness for service program
2 is, just as a primer on, you know, how it's
3 used elsewhere or how it's used within the
4 industry or how it's used generally and
5 educate us on how it might be effective in
6 confronting some of our challenges.

7 So with that, my thanks to Larry,
8 and turn it over to you.

9 MR. SHELTON: Thank you, Linda.
10 As Linda said, this is just intended to be a
11 primer on fitness for service and how it's
12 applied in various areas, including in our own
13 industry.

14 There are some examples in here
15 for illustrative purposes. There aren't any
16 recommendations in here. These examples are
17 just to help illustrate how fitness for
18 service approach actually works.

19 As we mentioned, there is not
20 exactly an ideal world of pipelines out there.
21 The ideal world for hazardous liquid pipelines
22 would be that, you know, the pipelines were

1 manufactured to a standard, and it was 100
2 percent quality controlled, so we knew exactly
3 what steel was being put in the ground,
4 designing construction to standards,
5 hydrostatic pressure tests to establish the
6 maximum operating pressure, and yes,
7 traceable, verifiable and complete records of
8 the design and construction and maintenance.

9 The pipe fully protected from the
10 environment so there are no hazards, no
11 threats to it and a steady operating pressure.

12 Well the reality is there is pipe
13 out there with older manufacturing design and
14 construction techniques. The MOPs may not
15 have been established by some party, records
16 may not be complete.

17 There are certainly environmental
18 threats to pipelines, and there's pressure
19 cycling. Sometimes not very aggressive,
20 sometimes it is more aggressive.

21 So how can we know then that
22 pipeline is in a safe condition to operate or,

1 in other words, how do we know that pipeline
2 is actually fit for service.

3 And so first of all, we probably
4 should talk about fitness for service and what
5 that actually means.

6 And there's a number of
7 definitions that are out there, but I think
8 this pretty well captures the essential
9 elements of it, and it's the condition of
10 being suitable for an intended service and
11 maintaining that suitability through an
12 intended period of service.

13 So making sure that it's suitable
14 for the service that you put it in, and that
15 it stays in that condition for a certain
16 amount of time until you can come back and
17 reevaluate it.

18 And key to fitness for service
19 then is the fitness for service assessment.
20 This is really the program behind fitness for
21 service.

22 And it is a quantitative

1 engineering evaluation performed to determine
2 the level of integrity, or fitness, of an in
3 service component that may contain a flaw or
4 damage.

5 And key elements of that are that
6 it's quantitative and it's an engineering
7 evaluation. And it's applied in many safety
8 sensitive industries already, nuclear power,
9 refining of petrochemicals, which we'll expand
10 on here in just a few minutes, aircraft,
11 especially air frames, again safety sensitive,
12 but not always easy to inspect on a constant
13 basis.

14 Even space vehicles where once
15 they're in space, it's difficult to do the
16 inspection, so we have to make sure that
17 they're fit for service before space flight.

18 And even medical appliances
19 because once they're installed, again, they're
20 difficult to inspect.

21 Expanding more on the assessments
22 on fit for service. It's a multi disciplinary

1 engineering analysis to determine whether the
2 equipment is fit for continued service over
3 the desired period of time.

4 Components may contain flaws, they
5 might not meet current design standards, or
6 they may be subjected to more severe operating
7 conditions than assumed in the original design
8 basis.

9 So these are reasons why you might
10 do an assessment, what would trigger the
11 actual assessment.

12 But what's important in assessment
13 is that it consists of standard analytical
14 methods to assess the flaws and damage to
15 quantify them and then to predict their
16 development over time so that you know the
17 period of time for which they will be fit.

18 And to the extent practicable,
19 analysis has to be quantified. When it can't
20 be accurately quantified, then the most
21 conservative reasonable boundaries are
22 assumed.

1 So additional safety factors might
2 also be applied, depending on things like the
3 tolerance for the measurement system that's
4 used.

5 And then the assessment leads to a
6 decision. And this decision could be to
7 continue the service with no further action.
8 And sometimes that's a design imperative.

9 For example, you know, I mentioned
10 medical appliances where for a coronary stent,
11 it has to go through thousands of pressure
12 cycles a day for decades without any further
13 testing.

14 So it has to be constructed in
15 such a way. Now the decision may be to
16 continue service or monitor at a specified
17 interval.

18 The decision may be to de-rate it
19 because it's not capable of going through the
20 next intended period at the current rate of
21 use or level of use.

22 Might be a decision to modify it,

1 to make it so that it can be suitable for the
2 next intended period, or to repair it, to
3 bring it back to its original condition, or to
4 replace it or to simply just abandon and move
5 on to something else.

6 Critical elements for fitness for
7 service assessments. The first one is
8 understanding the set of damage mechanisms to
9 which the component must be subject or may be
10 subject.

11 This is really important.
12 Understanding the damage mechanisms and not
13 just making assumptions as to what they could
14 be, but knowing what they are.

15 And their ideology and their
16 development must be understood. In other
17 words, the way they progress. So a particular
18 flaw, what will happen to it over a particular
19 period of time.

20 Will it continue to develop or
21 not? Is there some critical point that it
22 will reach and at what point will it reach it?

1 So it has to be, then, a measurement system to
2 quantify the flaw in its current state so that
3 we can then apply that what we know about how
4 it will develop.

5 So knowing all that, the time
6 dependence and the current condition, that's
7 all necessary to determine the remaining life
8 in making that decision from the previous
9 slide.

10 But the good news is generally,
11 the damage mechanisms for pipelines are pretty
12 well established. We have a lot of data,
13 reams of data regarding pipelines from a long
14 period of time from which to study them.

15 I mentioned use in the refining in
16 petrochemical, and that's found in API 579,
17 which now as known as ASME FFS-1. The two
18 documents were combined into one when it was
19 expanded beyond its original intent, which was
20 for in service operation of plant pressure
21 vessels, piping and tanks.

22 It was driven originally by OSHA

1 1910, the Process Safety Management
2 Requirements. And the refineries and
3 petrochemical facilities have a wide variety
4 of damage mechanisms, more so than pipelines
5 in general because of the conditions, the
6 hostile products that they deal with, the heat
7 and so on.

8 But FFS-1 addresses each of those
9 damage mechanisms then with a prescribed
10 evaluation process, and then guidance for the
11 decision making regarding continued service.

12 And it backs it up, also, with
13 providing the technical basis for the FFS
14 assessment. FFS-1 does have some application
15 to transmission pipeline assessments, but not
16 in a wholesale manner because the damage
17 mechanisms are different, and also the methods
18 of measurement are different.

19 So the principles that are already
20 at work in the hazardous liquid pipeline
21 industry are seen in 195.303, the risk based
22 alternative to hydrostatic pressure testing,

1 452, the integrity management programs, and
2 I'll talk a little bit more about those.

3 But also in API 653, the above
4 ground storage tank inspection program,
5 determining seam susceptibility to cracking,
6 fatigue analysis, and a number of others that
7 we could talk about.

8 But I want to talk about those
9 first two because they're good examples of
10 those fit for service assessment principles
11 being applied.

12 With the RBA, the regulations
13 prescribed decision making process to
14 determine whether the given pipeline requires
15 a hydrostatic pressure test to establish
16 maximum operating pressure.

17 And it's in tabular form, but it
18 essentially adds up to a flow chart of
19 weighted factors for documenting operating
20 history, pipe condition, risk failure, and
21 brings you then to a conclusion about whether
22 the pipeline can be operated safely, or if it

1 requires further evaluation on a schedule, or
2 that the RBA is not appropriate and
3 hydrostatic testing was required.

4 So for example, certain seam types
5 where it was determined that RBA, the
6 evaluation process would not adequately
7 determine whether that pipe was safe without
8 conducting hydrostatic tests.

9 If we were to revisit RBA today,
10 that might be a little bit different, other
11 additional seam types might be included
12 because the advances in technology give us new
13 measurement systems by which maybe we can
14 characterize the condition in those seams.

15 But at that time, they couldn't be
16 concluded, and therefore RBA was excluded for
17 that. And it requires an annual review of the
18 risk factors to make sure that things haven't
19 changed and that RBA is still appropriate for
20 that particular line.

21 And the integrity management
22 program as a fit for service application, it

1 establishes a minimum desired operating
2 interval.

3 So we did, in this case, start
4 with the desired interval, not determine what
5 the service life was. But we prescribed the
6 minimum desired operating level, in this case,
7 generally five years.

8 And then prescribes a testing and
9 evaluation that confirmed that it's going to
10 be fit for service for that period, until the
11 next testing cycle.

12 It prescribes integrating data to
13 determine the damage mechanisms for a
14 particular segment because it recognizes that
15 each segment has a unique set of damage
16 mechanisms, a small diameter mild steel
17 pipeline operating at a lower pressure doesn't
18 have the same ones as a large diameter, say
19 X52 or hard steel operating with a lot of
20 pressure cycles and close to its MOP.

21 So they're different and need to
22 be treated differently. It sets safe limits

1 for those damage mechanisms and provides for
2 shorter or longer intervals than the five
3 years, as indicated by engineering analysis.

4 And it drives the decision making
5 for safe continued service, based on what we
6 determined through our integrity assessments,
7 we decide whether to repair or not repair or
8 replace or even in some cases to abandon.

9 So in conclusion, FFS assessment
10 is widely accepted and applied model for
11 quantifying flaws and determining the
12 remaining life of safety sensitive equipment.

13 It's already being applied in
14 hazardous liquid pipeline industry in a number
15 of places. Understanding the damage
16 mechanisms is critical to successfully
17 applying fitness for service.

18 And the technology continues to
19 improve our ability to effectively apply it by
20 giving us better measurement systems so we can
21 more adequately quantify the current state of
22 a component.

1 And FFS greatly enhances our risk
2 management by replacing assumptions in the
3 absence of being able to apply quantification,
4 we end up taking very conservative
5 assumptions.

6 And now we can replace those
7 assumptions with qualitative analysis and real
8 risks then get identified through the
9 assessments.

10 And the resources can be
11 redirected from the over conservative
12 assumptions that we were making to those real
13 risks that are determined through FFS.

14 So with that, I think I'll turn
15 first to the industry members here, and any
16 comments or anything that we should elaborate
17 on?

18 CHAIRPERSON FORD: Questions? Mr.
19 Kuprewicz?

20 MR. KUPREWICZ: This is getting a
21 lot of discussion in the State of California
22 and there's a whole lot of attorneys. We're

1 not going to resolve it today. It sure got
2 people pretty stirred up.

3 And you can pick which side, I
4 don't really care. I just look and advise
5 people who telling the truth and who isn't.
6 Let me ask a question.

7 Under current federal pipeline
8 safety regulation, is Fitness for Service
9 specifically referenced or identified in
10 federal pipeline minimum safety regulations?
11 Yes or no.

12 MR. SHELTON: Using those
13 particular words, no.

14 MR. KUPREWICZ: Okay. We got a
15 lot of work to do then, apparently, before we
16 go too far in this. We're still working on an
17 integrity management program.

18 I'm not for or against this
19 particular from a public perspective. I just
20 look at the arguments that are being
21 presented.

22 And usually from a public

1 perspective, what adds credibility to an
2 industry position is can you independently
3 verify your assumptions? And if you can, then
4 you've got good, solid science.

5 It's when you make assumptions
6 that quote are best engineering judgement, but
7 there's no quantifiable trail, credibility
8 starts getting out the door and that's, you
9 know, we're not here to create fights, we're
10 here to solve problems. Thank you.

11 CHAIRPERSON FORD: I guess my
12 concern would be those pipes that have been in
13 the ground over 100 years. So some of them
14 possibly wouldn't be fit for service. Is that
15 true?

16 MR. SHELTON: Well, I'm trying to
17 understand the question. The question is
18 could they possibly not be fit for service.
19 That's possible, but it's through a fitness
20 for service assessment that that's determined.

21 CHAIRPERSON FORD: You have to
22 perform?

1 MR. SHELTON: That's right. And
2 if we can't get the quantifiable data, then we
3 have to then revert to the assumptions.

4 CHAIRPERSON FORD: Okay. Any
5 other questions? Oh, I'm sorry Jeff.

6 MR. WIESE: I think I would add
7 the comment that again, not trying to drive
8 any particular way, but I've seen enough
9 people have discussions.

10 Carbon steel pipe, by its nature
11 and its properties of carbon steel in the last
12 100 years doesn't technically age for pipe
13 operation.

14 It's all the other stuff that gets
15 into the pipe that can cause a problem. And
16 this keeps coming up because the public thinks
17 well, if it's old, we got to rip it out.

18 Well I can show you examples of
19 fairly new pipe that's probably not as good as
20 100 year, not 100, maybe 50 year old pipe. So
21 we want to be careful of those kind of
22 inferences that's real easy for people to

1 think well, I'm buying a new car, therefore it
2 must be better.

3 Well, of you bought a new car and
4 it's a lemon, yes, your older car might have
5 been better. But I want to encourage this
6 discussion here, but the devil's going to be
7 in the details because right now, they're
8 going to war in California and that's not the
9 place where you really want to be.

10 CHAIRPERSON FORD: And they're
11 starting war in Illinois, so that's why I ask
12 that question. Jeff?

13 MR. WIESE: I just wanted to add a
14 couple of quick points. And I agree entirely
15 with Rick's assessment. But I also very much
16 liked your initial slide, well one of the
17 initial slides, you don't have to go back to
18 it.

19 I mean, I think we all got the
20 point. In a perfect world, you know? In a
21 perfect world, we can all predict with some
22 level of accuracy where things are going.

1 Unfortunately, as you
2 acknowledged, we don't have a perfect world.
3 And as we've seen in, you know, many instances
4 over the past few years, the assumptions, or
5 Rick's point, the assumptions were predicated
6 on something that was less than solid.

7 You know, and so I couldn't agree
8 more. Really, you know, in addition, I wanted
9 to just take the opportunity to second what
10 Rick has just said. Some time ago, we used
11 this committee strictly to vote on rules.
12 Just vote on rules.

13 You know, when a rule came up, the
14 Committee would talk about the rule. What are
15 we going to do, is it technically feasible,
16 practicable and cost beneficial, and that was
17 it.

18 We agreed, you know, probably
19 three or four years ago that we were going to
20 expand the use of the committee and start
21 getting into policy relevant discussions that
22 presage, you know, regulations if there are

1 changes.

2 But to have an open and public
3 dialogue about important topics like this,
4 it's why we ask folks to come forward. But I
5 would put it in a larger context and we'll
6 continue this discussion, by the way,
7 tomorrow.

8 There is a larger thing if, you
9 know, whether it's we tried, I don't know how
10 you want to paraphrase this one. We kind of
11 cutely call it IMP 2.0, you know, as a way of
12 saying IMP was good.

13 We've accomplished a lot of stuff,
14 but there's stuff that remains to be done. In
15 the next take on IMP, what do we need to do?
16 That's the conversation we want to have with
17 people.

18 So we are going to be serving
19 stuff up in that regard. Just so that the
20 committee is aware of it. You know, when we
21 finally get to an implication, what's the
22 rule?

1 We'll have had a broader
2 conversation, because I'm with Linda. We can
3 be driven by Congressional mandates and
4 recommendations from everyone and their
5 brother to take care of one problem or
6 another.

7 But Todd sort of touched on it
8 earlier, is that the most important problem?
9 You know? Should we be tackling that one
10 first? Or just take them in alphabetical
11 order here?

12 Resources are limited. I think
13 Linda eluded to that. We have to, and I think
14 Rick made a statement about this at the last
15 meeting, you know, we need to focus and
16 prioritize.

17 So our goal, and you'll see
18 tomorrow, Ron McLean is here. He's chairing
19 the API SMS committee. He'll be talking about
20 that on purpose.

21 You know, again, it's part of the
22 process of warming up for IMP 2.0. We've had

1 workshops on risk assessment, right? We've
2 been engaged in risk management as long as
3 I've known some of you.

4 You know, and there's a lot of
5 good work yet to come. But we solicit your
6 input and your advice on these things. But we
7 do intend to hold multi-day meetings next
8 fall, which we're cutely calling IMP 2.0.

9 And I would like to do some work
10 between now and then so when we get there, you
11 know, we can actually have an informed debate.

12 So help us with the topics that
13 you want to talk about and we'll bring stuff
14 forward. And we should have an active
15 conversation on it. So I look forward to a
16 lot of those discussions.

17 I'll close by saying, one of the
18 things that as I look at the various
19 methodologies for predicting, which is really
20 what these are, they predict, you know, I'm
21 safer given a period of time, I always like to
22 say can we find some incidences where there

1 were failures and say what data was available
2 before the failure?

3 Using that model, would we have
4 predicted that that failure would happen in
5 that time? And if not, you know, what's wrong
6 with the model?

7 You know, was it a gap in the
8 data? So it's a very common technique to go
9 backwards and say that is the model suitable
10 because if it's not predicting these failures,
11 somebody could have done a poor run, they
12 didn't, you know, have all the data they
13 needed in there. Why is a real question.

14 So I really appreciate your
15 bringing that in. I think it is an important
16 part of the debate, and sorry for going on so
17 long.

18 CHAIRPERSON FORD: Richard
19 Kuprewicz? And Carl Weimer?

20 MR. WEIMER: Yes, just a question,
21 more of a comment actually than a question
22 because I guess from a public standpoint that

1 doesn't deal with these things every day, I
2 sometimes think we're talking semantics when
3 we talk integrity management versus SMS versus
4 fitness for service.

5 It all sounds like the same thing
6 to me. You know, integrity management, at
7 this point you're already supposed to, you
8 know, assess your risks, test for those risks,
9 reevaluate to prevent something from
10 happening.

11 That sounds like what fitness for
12 service is and to some degree what SMS is,
13 too. And I don't know as we move forward with
14 these discussions of fitness for service and
15 SMS, are we really looking at just refining,
16 getting to IMP 2.0 refining integrity
17 management?

18 Are we talking, like, more
19 prescriptive into the regulations for what
20 fitness for service or SMS, is that where
21 we're going with these, because it all sounds
22 like one in the same to a large degree.

1 CHAIRPERSON FORD: Jeff?

2 MR. WIESE: Well, I think Linda's
3 probably chomping on the bit to answer that
4 one, too. You know, a highly relevant
5 question.

6 They're all integrally related.
7 You know, I think we would tell you that IMP
8 was a good sized bite. It's all we could
9 digest at the moment when we took it.

10 I would see IMP as a subset of
11 SMS. You know, and fitness for service itself
12 is really a subset of SMS. You know, SMS is
13 something more broad.

14 I think you'll hear a lot on that
15 tomorrow, so I won't, you know, steal Ron's
16 thunder and other members who are fairly
17 engaged on that front.

18 But we need to have a lot of
19 discussion about SMS. And I think you'll
20 begin to see, and there are a lot of phrases
21 used, QMS, Quality Management Systems. SMS is
22 a subset of Quality Management Systems itself.

1 So any rate, a lot more to come on
2 this topic, and we do need to have a
3 discussion in the public on that one.

4 CHAIRPERSON FORD: Oh, I'm sorry.
5 Mr. Lesniak?

6 MR. LESNIAK: You know, over the
7 time that I've been involved in pipeline
8 issues is, you know, I think the regulatory
9 scheme and the industry is both come a long
10 ways in the years that I've been involved, and
11 come a long ways rapidly.

12 One of the things that I don't
13 hear a lot of discussion about is how can the
14 public trust that an operator who clearly has
15 a vested interest in the outcome of a fitness
16 for service analysis, an integrity management
17 program, and people here in the industry will
18 probably say this, had a lot of people in the
19 industry say to me there are good operators
20 and there are operators that maybe don't meet
21 the bar.

22 And where is the check? You know,

1 I think as we move forward into IMP 2.0, is
2 where is the analysis and the check at with
3 PHMSA that is going in and looking over the
4 shoulders of these operators and saying we
5 don't agree with your analysis.

6 Or yes, you did a great job with
7 this analysis. Your pipeline is good to go
8 for the next decade. Or however long it is,
9 or no, we don't agree with your analysis, and
10 you've got a pipeline that is a potential
11 problem, and you need to take it out of
12 service now.

13 Or you need to do additional
14 testing, or you need to do something before
15 there's an accident.

16 And it seems to me like that's one
17 of the areas that over the last decade where
18 we've made enormous strides, I think, both in
19 the industry and with the regulators in the
20 programs is that identifying bad situations
21 before we have an accident.

22 That I think that it appears to

1 mean, maybe I'm wrong, but it appears to mean
2 that this analysis that is occurring inside
3 the industry, for the most part, is staying
4 inside the industry until there's an accident.

5 And then the regulators come in
6 behind, check those records and go oh, well
7 you know, you should have spotted this. And
8 as part of the discussion that we have going
9 forward is how do we make sure it's being done
10 right, and in a way that the public can trust?

11 And is identifying problems more,
12 that the regulators have the ability to
13 identify problem operators before there's an
14 accident.

15 CHAIRPERSON FORD: Linda?

16 MS. DAUGHERTY: Yes. You know, I
17 think you pose a very good question because,
18 you know, if you look on the surface and you
19 say look, we've had a lot of accidents in the
20 last few years, why do those occur?

21 If we have integrity management
22 plans and they're effective, why did any of

1 those occur? And I think that's a valid
2 question.

3 But I do believe that what the
4 public often does not see are all of the
5 efforts that go into preventing accidents that
6 don't occur.

7 Those are the ones that, through
8 our inspections and through our oversight
9 activities, both the federal and the state,
10 you know, we are out there.

11 And we do look at, you know,
12 integrity management plans, the work that they
13 put in, their technical analysis, their
14 engineering analysis.

15 And we look at it and sometimes we
16 say no, not good enough. Go back and do it
17 over again. Or we say this is a concern to
18 us, we need to issue a safety order or we need
19 to issue a corrective action order to
20 remediate it.

21 But not to be a broken record, but
22 it does come back, again, to resources. And

1 Jeff mentioned that. Where do we apply our
2 limited resources?

3 When you realize that we have 135
4 inspectors, plus we have states, about 300
5 inspectors for 2.6 million miles of pipe,
6 that's a lot of ground to cover.

7 That's a lot of analysis to look
8 at. So you know, that whole broken record of
9 we need more resources, we have to decide
10 where we put our attention.

11 Who do we go out and look at?
12 Where do we focus our inspectors and really
13 dig deep? And we do have risk, you know,
14 priority schemes to help us identify where we
15 need to dig deeper.

16 But we also have to explore things
17 like, you know, I'm trying to think of the
18 right word for it. But a way to target
19 inspection of high risk operators, which we
20 did with IMP, but then go in and focus on what
21 we review with them to make sure that they are
22 thinking through the decisions.

1 Integrity management is all about
2 making sure you have a sound basis for the
3 decisions you make. You do need someone
4 looking over the shoulder and checking it.
5 And that's our role. I believe that is our
6 role.

7 But I think it's the operator's
8 ultimate responsibility to make sure those
9 judgements are made. I don't know if I
10 answered your question. Do you want to add to
11 that?

12 MR. WIESE: I just want to add a
13 couple things real quick. You know, first of
14 all, I would say Carl and I have been friends
15 for quite a few years.

16 We agree on most things, not on
17 all things. As I say, I work for the public.
18 We're public representatives. So public
19 doesn't necessarily trust government, you
20 know?

21 But I will tell you, the people
22 that I work for are totally dedicated to that.

1 We've done survey after survey of our people.

2 They may disagree with us on 100
3 other things, but on that mission of public
4 safety, they're fully committed to that.

5 Linda talked about the resource issue.

6 On IMP, I'll tell you, we've
7 written hundreds of violations about things
8 that we've found. But we can, with the
9 resources we have, we can only be there a
10 slice in time, and only enough time to sample
11 what's going on. Right?

12 That's clearly all the resources
13 that are available for that. We spend a lot
14 of our time with the transmission folks. The
15 states, you know, dominantly spend their time
16 with distribution.

17 Although some folks like Massoud
18 have both. One idea that will keep coming up
19 in our discussions as we get into SMS, there's
20 a role for the companies to do more about
21 checking themselves.

22 In a really structured management

1 system, there is always a component for
2 internal oversight and reporting back to
3 management that's independent of the people
4 who are really doing the work.

5 So it's not the answer. There's a
6 roll for transparency here. You know, more
7 data in the public domain. Carl's worked that
8 for years, you know, and I think successfully.

9 But I do want to point out and
10 underscore this role for internal evaluations
11 that advise management, there are models we'll
12 talk about as we get into SMS.

13 Like, in the nuclear world there's
14 a group called INPO. They're, you know, an
15 independent group who conduct audits for the
16 companies.

17 And they feed back to the
18 management. They don't give it to the
19 regular, I would love to have that. But I
20 don't think that's going to happen.

21 But I still believe there's a role
22 for the company to get an independent,

1 unbiased, sort of assessment of where they are
2 so they, at least, are aware of where they are
3 and can act on it.

4 So it's a good question. I think
5 it does again feed into the SMS discussion
6 that we'll have and you know, hopefully that
7 will, over time, we'll begin answering that.

8 CHAIRPERSON FORD: Mr. Pierson?

9 MR. PIERSON: Craig Pierson,
10 industry. If you look back, and Larry talked
11 about this at Pipeline Safety Trust
12 Conference.

13 You look back at IMP, and it's
14 clearly driven some pretty remarkable
15 improvements in the industry. And I think
16 we're at a point where we need to figure out
17 how to drive more. We would all agree with
18 that.

19 I would also say that when you're
20 on the receiving end of one of the audits, it
21 is rigorous. The auditors are smart, and
22 they're committed, and they ask hard

1 questions.

2 And a lot of it's driven to, using
3 Sam's phrase, do you have a sustainable
4 process that will outlive the people who are
5 doing it today?

6 And will you get the same decision
7 tomorrow? Is it repeatable? Is it
8 sustainable? And I've always been impressed
9 with the audits. And it's driving us in the
10 right direction.

11 CHAIRPERSON FORD: Any other
12 questions, concerns? I'm sorry, Linda.

13 MS. DAUGHERTY: You know, one
14 other thing I would like to add is when you
15 look at some of these decisions, these risk
16 based processes, you know, your evaluation
17 whether it be fit for service or IMP, it would
18 be really nice if there was a standard process
19 that we could say here, slap this process and
20 everybody use it.

21 But it just doesn't fit. So every
22 individual system has to have a slightly

1 different factors. They have to look at
2 slightly different risks.

3 You know, Texas has different
4 issues that they have to deal with that people
5 in Minnesota might not need to deal with.

6 You know, Minnesota folks have to deal
7 with frost heave. I doubt you have too much
8 frost heave in Texas. So, I mean, there are
9 different issues.

10 And so that means every process
11 has to be modified slightly. So when you go
12 out to oversee it, you have to take all that
13 to consideration and say did you cover
14 everything? Is there anything you missed?

15 And so you know, if we can get to
16 the point where we have elements that say
17 these are all the things that need to be
18 considered, you know, whether it be critical
19 elements of SMS, or elements of a fitness for
20 service process, or elements of an integrity
21 management plan, wherever it fits, if we come
22 to agreement on what those are and hopefully

1 those will come out in our IMP 2.0 session,
2 maybe we can take a step closer to coming up
3 with a process that will fit across
4 infrastructure.

5 And we'll be a step closer to more
6 public transparency on some of these analysis.

7 CHAIRPERSON FORD: Craig, is your
8 card still up?

9 MR. PIERSON: No.

10 CHAIRPERSON FORD: Shelton, I'm
11 sorry.

12 MR. DENTON: Todd Denton.

13 CHAIRPERSON FORD: Denton.

14 MR. DENTON: Industry.

15 CHAIRPERSON FORD: Looking at the
16 wrong person.

17 MR. DENTON: That's okay. Just a
18 couple of comments. First, I didn't think I
19 was going to agree where Rick was going at
20 first on his first comment with the fitness
21 for service because I don't think terms
22 matter.

1 But I like where you ended up
2 because that is, and I agree with you, I think
3 it's important, as Larry pointed out in his
4 presentation, that it's an engineering based
5 analysis, and that it's sound, it's
6 quantitative.

7 And then second, there was a
8 little bit of conversation, this may or may
9 not be the place for it, but about good
10 operators, bad operators.

11 I know PHMSA's addressing that.
12 And you know, from industry, we're doing the
13 same. You know, we've got an initiative on
14 improvement across the board.

15 You know, within our company we
16 like to say when we go out and visit our
17 people, you're only as good as your worst
18 employee.

19 Well, as an industry, we're only
20 as good as our worst performing operator. No
21 different. So we all have incentive for the
22 whole industry to perform better.

1 And so if some companies have
2 better resources than others, we have those
3 best practices out there that we can help each
4 other with. And that's obviously an effort
5 that API and ALP will have ongoing.

6 CHAIRPERSON FORD: Thank you.
7 Jeff?

8 MR. WIESE: Just a kind of a
9 closing comment, in case anybody has anything.
10 Okay, I just want to close by further
11 addressing Chuck's point.

12 You know, you asked a question,
13 which I apologize, I didn't answer. You know,
14 performance, prescriptive, that sort of thing?
15 Pardon me.

16 A lot of the management systems
17 stuff we're going to talk about, you'll find
18 that's very performance based language. But
19 there's a clear role for prescription within
20 that.

21 You can't just have one or the
22 other. You know, I'm of a firm opinion that

1 it's really the proper blend of both that gets
2 you there.

3 SMS and the performance level
4 stuff will describe the overall system and the
5 components, you know, and how they relate and
6 that they need to exist.

7 And then at certain places, we'll
8 have to decide. And I think with the
9 discussions here and elsewhere, which parts of
10 it really, you know, you just can't risk
11 falling below that. That has to be
12 prescribed.

13 So I think it really will, even in
14 the end. Ours is now. You know, we filed a
15 report with Congress years ago on integrity
16 management that said the risk management
17 demonstration program which preceded all this
18 stuff was, at the time, the thought was well,
19 why don't we substitute a good risk management
20 program for the code?

21 You know, clearly we decided at
22 the end we reported back to Congress, that's

1 not going to happen. You know, you're going
2 to have a combination of those two things in
3 order to get where you need to go.

4 So it's, you know, the balance of
5 those things to reflect what Linda's said,
6 that all these systems, all these operators as
7 we go out and look at them, they're all
8 different.

9 You now, they're dealing with
10 different variables, different kinds of
11 equipment, different environments, different
12 histories, you know, different people.

13 There's room for people to
14 customize to fit their system. But you know,
15 tomorrow's a good discussion as well because
16 you know, we're not shy about using
17 enforcement.

18 You know, if it's a bad operator,
19 we'll be glad to do that. In fact, just
20 because somebody gets enforcement doesn't mean
21 they're a bad operator.

22 I've rarely met anyone, including

1 you know, myself who hits on all bases. You
2 know, some are really good and most of them,
3 but it's quite possible for somebody to get a
4 violation, still be a good operator.

5 You know, so we need to keep
6 working on that, because I'm all for driving
7 bad operators out of the business. They make
8 my life difficult.

9 They make the industry's life
10 difficult. So keep that in mind as we talk
11 about enforcement tomorrow. We might need
12 your help.

13 CHAIRPERSON FORD: Mr. Denton, are
14 you --

15 MR. DENTON: That's it, thanks.

16 CHAIRPERSON FORD: If there are no
17 other questions, thank you Linda and Larry
18 Shelton. Jeff, do you want to close us out?

19 MR. WIESE: I will by thanking
20 you, first of all. And I hope you're with us
21 tomorrow.

22 CHAIRPERSON FORD: Yes, I'll be

1 here.

2 MR. WIESE: Okay, very good. Yes,
3 we aren't going to say goodbye then until
4 tomorrow night.

5 CHAIRPERSON FORD: Okay.

6 MR. WIESE: I appreciate your help
7 again, once more. You're always very gracious
8 with your time and efforts on our part. I
9 very much appreciate it.

10 Thank the members of the
11 committee. We're letting you off a little
12 early today. It's a light day, it's just a
13 briefing day.

14 Tomorrow we have a couple of
15 votes. Those are always more interesting
16 days, as you know. You've been here.

17 CHAIRPERSON FORD: Right.

18 MR. WIESE: So thank you for your
19 time today, and we'll look forward. Are we at
20 9:00 a.m.? You can tell that John's not an
21 engineer. He'll start meetings at 9:00.

22 You know, we're all sitting around

1 having our third cup of coffee, wondering when
2 we're going to get going by then. All right,
3 thank you all.

4 CHAIRPERSON FORD: Thank you.

5 (Whereupon, the meeting in the
6 above-entitled matter was concluded at 3:33
7 p.m.)

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A				
AA 48:3	27:19 121:2	advance 59:21	allowing 42:3	apologize 10:22
AB 34:1,7	acronym 84:9	advanced 75:17	allows 94:17	87:6 94:15 141:13
abandon 109:4	act 31:21 33:22	advances 113:12	ALP 141:5	apparently 117:15
115:8	44:8,8,17 60:17	advice 124:6	alphabetical	appears 129:22
ability 15:17 44:19	60:22 136:3	advise 117:4	123:10	130:1
100:22 115:19	acting 11:16	135:11	alternative 111:22	appliances 106:18
130:12	action 100:10	advisory 1:6,13	amazing 72:16	108:10
able 4:21 88:21	108:7 131:19	10:11 11:14 18:3	amend 45:7	applicable 84:2
89:2 96:6 116:3	active 9:2 79:9	42:3 73:16 87:10	American 99:3	application 45:15
above-entitled	84:12,13,18	89:1 95:4	amount 14:22 20:5	94:16 111:14
146:6	124:14	afternoon 4:3 42:1	23:1,5 50:17	113:22
absence 116:3	actively 81:1 85:1	60:12 78:13 98:16	72:17 75:13	applied 29:2
absolute 25:14	activities 53:15,19	age 119:12	105:16	102:19 103:12
101:14	71:18 80:9 131:9	agencies 45:21	analysis 15:16,19	106:7 108:2
academic 40:8	actual 28:2 50:8	agency 66:3	22:12 37:18 54:10	112:11 115:10,13
Academy 85:9	107:11	agenda 4:22 12:5	57:11 68:18 107:1	apply 25:2 57:16
acceptable 33:4	add 20:17 37:3	13:7 60:10 78:10	107:19 112:6	110:3 115:19
accepted 115:10	58:16 71:7 95:9	88:22 98:12	115:3 116:7	116:3 132:1
Access 97:18,19	119:6 120:13	aggressive 104:19	128:16 129:2,5,7	applying 115:17
accident 45:5,6	133:10,12 137:14	104:20	129:9 130:2	appointment 7:14
129:15,21 130:4	added 47:21 57:20	aghost 4:11	131:13,14 132:7	appreciate 7:19 8:9
130:14	addition 121:8	ago 7:8 99:18,21	139:6 140:5	39:20 55:22 98:22
accidental 61:7,16	additional 33:15	100:11 121:10,19	analytical 48:22	125:14 145:6,9
70:18	108:1 113:11	142:15	107:13	approach 48:22
accidents 63:7,13	129:13	agree 24:19 25:5	analyzing 51:18	49:5 85:10 103:18
63:18,20 65:6	Additionally 44:17	74:8 120:14 121:7	and/or 57:9	appropriate 23:18
70:6 75:1 80:4	address 27:11	129:5,9 133:16	announce 8:14	48:11 66:21 113:2
100:8 130:19	33:16 48:16 54:16	136:17 139:19	announced 87:17	113:19
131:5	77:9,15 85:13	140:2	announcements	approximately
accomplish 80:7	87:4 92:1 101:15	agreed 16:8 25:21	9:6 47:1	93:3
accomplished	addressed 27:17	121:18	annual 43:14	area 74:21 96:19
122:13	47:20 48:21 57:15	agreement 138:22	113:17	areas 16:7,15 43:19
account 75:10	102:1,2	ahead 5:22 6:5 63:9	answer 20:11 35:7	45:10 103:12
accountability	addresses 91:16	99:7 101:13	38:17 127:3 135:5	129:17
44:18 59:1	111:8	air 28:9,11 106:11	141:13	arena 9:3
accounted 64:1	addressing 140:11	aircraft 106:10	answered 133:10	arguments 117:20
Accounting 59:2	141:11	alarm 19:18 31:7,7	answering 60:2	Armstrong 1:18
Accufacts 1:21	adds 112:18 118:1	31:15,19,20	94:18 95:1 136:7	12:9,9 57:5,6,7
accuracy 75:19	adequately 113:6	alarms 18:15 19:16	answers 101:17	87:11
120:22	115:21	19:17 31:2,5,6,10	anticipate 72:13	arrival 53:16
accurate 26:21	adjustment 49:12	31:14	anybody 9:9 141:9	art 70:11 75:16
46:20	administration 1:4	Alexandria 1:13,14	anyone's 17:20	articles 81:4 89:18
accurately 107:20	4:7 34:16 35:5	algorithm 30:19	anyway 9:5 35:4	90:3
achieve 80:15 83:3	39:1,9 56:18	Alliance 91:22	100:2	asked 5:1 7:5 42:9
acknowledge 27:18	100:18	allow 4:15 7:1	API 27:6 110:16	58:22 141:12
acknowledged	Administrator	34:11	112:3 123:19	asking 6:15 18:5
	1:17 4:5 84:18	allowed 34:3	141:5	ASME 110:17

aspects 16:9 22:6 22:11 83:17	author 14:21	141:18	49:18 51:2,6 52:20 53:9,22	business 7:12 144:7
assess 107:14 126:8	automatic 3:8 42:5 42:12 44:11 45:8	bases 144:1	board 8:20,21 140:14	Butters 84:18 95:22
assessed 42:13 51:1	45:15,19 46:15	basic 30:1 51:20	Bobby 55:15	buying 120:1
assessment 105:19 107:10,11,12 108:5 111:14 112:10 115:9 118:20 120:15 124:1 136:1	automation 15:2	basically 34:17 36:5,14 66:4	bodies 61:2 62:9 65:20 66:5,17 67:3 69:7 70:20	<hr/> C <hr/>
assessments 106:21 109:7 111:15 115:6 116:9	available 9:22 22:10 24:5 33:2 92:16 125:1 134:13	basis 80:19,22 106:13 107:8 111:13 133:2	body 62:11,20 65:6 66:12	C 1:20
asset 88:4	avoid 93:11	Battelle 43:9,10	bolded 16:3 87:15	California 116:21 120:8
assignment 58:20	avoided 54:4	believe 6:14 10:21 62:15 66:8 69:13 90:6 95:7 131:3 133:5 135:21	booths 81:4 89:9	call 3:3 10:12 11:9 30:2 92:4 100:10 122:11
assistance 92:9,10 92:15	aware 37:14 90:18 90:20 93:13 95:17 122:20 136:2	beneficial 55:17 121:16	bought 120:3	called 11:19 41:1 84:8 135:14
Associate 1:17 4:4	awareness 79:16 84:10 93:21,22	benefit 22:12 52:19 55:8	boundaries 107:21	calling 27:16 124:8
associated 17:18 48:10 68:19 100:3	A&M 9:1	benefits 42:21 45:4 51:14	break 38:1 46:20 52:12 53:19 78:1 95:2	calls 96:20
Associates 13:15 14:17,20	a.m 145:20	best 13:21 28:20,22 68:7 70:10,13 71:2 86:8,20 92:5 97:11 118:6 141:3	breaks 52:4,5	Cam 11:6
Association 7:15 83:7 89:12 94:13	<hr/> B <hr/>	bet 59:20 98:11	Bresland 8:19	Cameron 35:22
assumed 107:7,22	B 1:21	better 7:18 77:4 78:17 82:13 90:12 90:14 91:8 97:6 115:20 120:2,5 140:22 141:2	brief 9:11 60:16	capabilities 17:17 45:2 54:12 79:15
assuming 65:21	back 17:11 20:7 36:6 38:6 48:4 58:22 76:11 77:16 78:7 105:16 109:3 120:17 131:16,22 135:2,17 136:10 136:13 142:22	biology 43:21	briefing 5:8 42:4 54:15 145:13	capable 108:19
assumption 37:6 38:2	background 14:3 15:11 44:6	beyond 48:14 69:20 110:19	briefings 4:20	captures 105:8
assumptions 49:20 109:13 116:2,5,7 116:12 118:3,5 119:3 121:4,5	backhoe 92:7	bibliographies 27:3	Briefly 86:3	car 120:1,3,4
assure 102:20	backs 111:12	big 5:21 89:9	bring 24:16 109:3 124:13	carbon 64:22 119:10,11
ASVs 42:22 45:4 51:14 52:15 53:6 55:5	backwards 125:9	bigger 66:11	bringing 125:15	card 11:22 12:3 35:9 139:8
atmospheric 50:22	bad 4:8 99:16,17 129:20 140:10 143:18,21 144:7	billion 43:14	brings 112:21	care 68:15 117:4 123:5
attended 81:12	Baker 15:5,7	bit 9:7 14:3,10 15:11 20:8,8 22:3 28:21 32:1 34:8 63:19 86:7 103:1 112:2 113:10 127:3 140:8	broad 127:13	career 84:19 96:4
attention 69:16 75:4 132:10	balance 69:21 143:4	bite 83:22 127:8	broader 67:5 71:20 123:1	careful 119:21
attorneys 116:22	Baltimore 89:13	Blaine 2:13 60:11 60:13 72:8	broken 83:22 84:1 131:21 132:8	Carl 1:25 13:2 125:19 133:14
audience 9:7 12:3	bar 128:21	blend 142:1	brother 123:5	Carl's 135:7
auditors 136:21	based 26:17 27:22 28:1,2,22 36:6 41:14 43:6 47:18 49:4 58:11 68:18 72:2 111:21 115:5 137:16 140:4	blocked 42:14	Bruno 45:6	carried 19:14
audits 135:15 136:20 137:9			budget 43:14 100:20	case 26:3 47:22 48:2,5 52:3 54:10 54:10 55:9,9 114:3,6 141:9
Austin 1:22 7:5 13:5 75:13			bug 94:15	cases 26:9 36:11 72:11 115:8
			build 80:20	categories 28:8
			building 43:19 50:20,21 83:3	categorized 50:9
			built 99:21,22	cause 119:15
			bullet 85:19 92:20	cell 11:21
			bulletin 95:4	center 43:20 44:3,5 96:17
			burial 62:17,18	
			Buried 3:12 60:10 60:18	

centers 96:13 97:5	chance 34:5	141:19	commenters 23:12	communities 90:18
central 74:18	change 24:1 25:17	clearly 27:14 71:22	47:9	90:19 92:11 93:14
certain 32:18 84:2	76:21	72:8 128:14	comments 14:12	94:20 95:2
101:20,20 105:15	changed 26:7,12	134:12 136:14	16:7 18:4 23:10	community 78:18
113:4 142:7	47:13 48:9,17	142:21	23:11,13,14,16	79:17 80:12,17
certainly 17:7	113:19	close 3:22 10:18	24:1,4,11,21 27:2	81:2,11 83:7 84:3
20:17 21:6 23:3	changes 14:13	114:20 124:17	33:2 46:10,10	84:10 87:4 88:2
24:9 30:16 31:3	25:15 26:10 47:17	141:10 144:18	47:7,10,12,13,16	89:5 92:14 93:11
32:9 33:10 38:5	56:3,4,10 76:22	closed 19:11,22	47:18 55:1 56:1	96:2,4
59:14 79:8 82:15	122:1	47:2	56:11,14 57:3	companies 134:20
104:17	channels 63:12	closer 97:5 139:2,5	58:12 116:16	135:16 141:1
Certainty 44:8	89:6	closing 59:10 141:9	139:18	company 1:20
cetera 15:18 25:10	characterize	closure 47:19 49:18	Commerce 5:17	35:20 135:22
29:9 32:4	113:14	51:2,6 52:20 53:9	55:14	140:15
CFR 25:1 45:7	CHARLES 1:22	54:1	Commission 1:25	complete 104:7,16
CGA 8:5,5	chart 112:18	closures 42:14	55:15	completely 44:16
chair 4:16 6:15	check 18:22 19:3	46:21	commissioned	complex 20:18 50:6
chairing 6:13	39:17 128:22	code 142:20	54:15	76:18 102:5
123:18	129:2 130:6	coffee 10:19 146:1	Commissioner	complexity 54:11
Chairman 41:21	checking 133:4	collaboration	5:18 34:11	compliment 74:5
Chairperson 1:15	134:21	86:15	committed 134:4	component 106:3
1:17 6:3,8 11:11	cheese 21:10	collect 46:4	136:22	109:9 115:22
13:6 33:6 34:10	chemical 8:20,21	Collette 6:12	committee 1:6,8,13	135:1
35:8 37:4 38:9	82:17	Colonial 1:20 8:2	1:14,17 3:4,6,11	components 107:4
39:19 41:19,22	Cheryl 12:4	12:16 95:16	3:15 4:16,19 5:4,7	142:5
55:11 57:5,18	Chief 87:12	combination 143:2	6:16,20 7:7 8:7	comprehensive
58:7 60:5,9 65:14	Chiefs 89:12	combined 54:2	9:14,19 10:11	82:6 83:16 91:11
67:7 68:20 70:2	chomping 127:3	110:18	11:14 13:11 27:4	comprised 9:14
71:6 73:8 74:14	chose 22:6	combustion 50:2	27:11 42:3 56:22	computational
76:2 77:21 78:4,9	Christine 15:6	come 5:2 7:3 19:3	71:15 73:16 76:11	44:3 48:22
94:7 95:11 98:6,9	Christmas 98:21	39:4 68:5 83:1	76:13 89:1 95:19	computer 29:8
98:12 116:18	Chuck 4:9,10 7:4,5	84:6 85:6 91:18	121:11,14,20	computers 43:15
118:11,21 119:4	7:6,9,20	105:16 122:4	122:20 123:19	concept 31:13
120:10 125:18	Chuck's 141:11	124:5 128:1,9,11	145:11	62:14
127:1 128:4	circumstances	130:5 131:22	committees 13:20	concern 100:9
130:15 136:8	72:13	138:21 139:1	76:6 87:10	118:12 131:17
137:11 139:7,10	cities 7:10,13,19	comes 9:8 38:2	common 25:9 52:5	concerns 25:3
139:13,15 141:6	City 1:19,22 7:4	comfort 10:14	125:8	137:12
144:13,16,22	12:10 13:4 75:12	coming 7:20 38:14	communicate	concluded 113:16
145:5,17 146:4	clarifications 26:16	61:12 98:18 99:1	90:12 93:6,7,8	146:6
chairs 87:19	clarified 48:11	119:16 134:18	94:18 96:12 97:9	conclusion 63:10
Chairwoman 13:10	99:17	139:2	communicated	112:21 115:9
Challenge 89:15	clarity 57:20	comment 5:14 24:4	93:9	concurrency 39:8
challenges 17:18	Class 45:11,11	54:22 55:12 56:2	communicating	condition 104:22
99:19 100:3 101:1	clause 68:1	59:19 67:13 69:15	81:1	105:9,15 109:3
101:14 103:6	clear 26:6,13 34:14	119:7 125:21	communication	110:6 112:20
champion 8:4	35:12 72:19	139:20 141:9	73:21 88:15	113:14

conditions 50:22 107:7 111:5	45:12 52:3 73:2 99:13	contractor's 34:22 41:11 56:16	92:14,19 95:3	cup 146:1	
conduct 42:12 43:18 44:18 59:11 93:4 135:15	consideration 21:2 56:1 138:13	contractual 56:15	court 12:4	current 39:7 67:21 70:10 87:13 107:5 108:20 110:2,6 115:21 117:7	
conducted 45:17 85:20	considerations 34:2 45:18	contribute 29:12 86:9	Courthouse 1:14	cover 3:12 34:17 60:10,17 61:6,18 61:21 62:5 63:11 64:3,13,16 65:5 65:10 66:18,20 67:19 70:7,16 71:3 72:9 77:19 79:6 85:18 132:6 138:13	currently 20:1,6 22:10 43:11 99:12 101:9,10
conducting 113:8	considered 18:20 20:14 25:14 66:5 66:12 138:18	contributing 61:16	coverage 61:15	curriculum 83:13 83:15,17 91:11,12	
conference 82:1 89:11,13,14,16 136:12	considering 11:16 11:17	control 17:6,10 28:14,16 36:2 37:10,21 42:13 45:9,16,16,20	covered 27:20	customize 143:14	
conferences 81:3 89:9,10	consistent 31:11	controlled 3:9 42:6 44:11 104:2	co-authors 15:5	cut 63:12 71:4	
confess 88:6	consistently 79:20	controller 28:14,16 31:15	CPM 25:9 29:7 48:14	cutely 122:11 124:8	
configuration 54:12	consists 107:13	controlling 53:20	cracking 112:5	cutting 76:7	
configurations 29:8	constant 106:12	conversation 96:8 122:16 123:2 124:15 140:8	cracks 52:6	cycle 114:11	
confirm 29:16 30:20 31:19	constrain 10:3	convey 20:12	Craig 1:23 12:18 136:9 139:7	cycles 108:12 114:20	
confirmed 114:9	constrains 65:20	Cooperative 92:22	create 31:5 79:22 82:11 86:21 87:1 88:17 118:9	cycl 104:19	
confirming 26:20	constraints 46:2 66:10	Coordinator 60:14	creation 81:6	C-O-N-T-E-N-T-S 3:1	
conflicting 30:22	constructed 42:22 44:15 46:3 51:14 52:16 55:5 100:1 108:14	copy 12:3	Creation 44:8	<hr/> D <hr/>	
confronting 103:6	construction 50:21 99:22 104:4,8,14	coronary 108:10	created 69:6 82:16 94:16	daily 80:18	
confusing 59:8	contact 91:6 93:17 93:17 95:1	Corporation 1:25 12:12	creating 81:6	damage 8:3 49:19 50:13 53:10,20 54:5 106:4 107:14 109:8,12 110:11 111:4,9,16 114:13 114:15 115:1,15	
Congress 33:12 34:4 38:15 56:8 58:5 62:2 65:3,7 73:12 101:3,5 142:15,22	contain 106:3 107:4	correct 6:3 11:6 56:12 58:6	Creation 44:8	damaged 53:12,17 54:8	
Congressional 14:4 15:13 33:11 44:7 54:17 58:18 71:12 123:3	contained 32:13	correction 101:21	credibility 118:1,7	data 26:2,6,17,21 28:2,18 36:7 63:2 63:3 66:2 69:4,12 73:12 110:12,13 114:12 119:2 125:1,8,12 135:7	
Congressman 55:15	context 20:9 21:19 39:21 122:5	corrective 131:19	creek 65:22 66:11	date 65:4 88:20	
connect 7:18	continue 69:14 108:7,16 109:20 122:6	correspondence 33:16	creeks 66:9 69:13	Daugherty 2:11 98:14,16,17 130:16 137:13	
connections 97:14	continued 107:2 111:11 115:5	cost 22:12 32:1,2 42:21 45:3 51:13 51:20 52:19 54:4 55:8 121:16	crew 28:10,12	David 8:18 14:21	
consequence 42:15 45:10	continues 115:18	count 101:5	critical 31:20 109:6 109:21 115:16 138:18	day 108:12 126:1 145:12,13	
consequences 47:21 51:3 53:7 63:20 73:1 79:13	Continuing 89:14	counties 7:19	cross 62:9	days 145:16	
conservatism 49:7	continuity 82:19	country 89:10 91:3	crosses 65:22	deadline 24:4	
conservative 49:4 107:21 116:4,11	contract 34:14	County 7:15	crossing 62:20 67:20,20 68:10 75:11	deal 7:12 80:21	
consider 44:22	contracted 42:11	couple 4:14 5:3,15 10:14 26:4 27:6 65:16 99:18 100:11 120:14 133:13 139:18 145:14	crossings 63:4,8 64:12 65:6,18 67:3,5 68:4 70:19 74:19,20		
	contractor 16:8 19:4 34:15	course 4:11 80:1,3 80:5 83:2 87:2	crude 64:6,8,17		
	contractors 14:11 22:6 24:19 25:5 25:21 28:10,12		CSA 40:21 41:11 41:17		

92:11,16 111:6 126:1 138:4,5,6 dealing 62:18 91:20 143:9 debate 71:20,21 77:18 124:11 125:16 debris 72:11,14 decade 102:10 129:8,17 decades 108:12 December 1:10 81:20 98:19 decide 56:19 115:7 132:9 142:8 decided 63:8 142:21 decision 30:19 35:6 108:6,6,15,18,22 110:8 111:11 112:13 115:4 137:6 decisions 132:22 133:3 137:15 declines 53:14 decreases 54:8 Decreasing 53:3 dedicated 133:22 deemed 23:16 deep 62:19 132:13 deeper 132:15 defense 21:5,16 definitely 31:20 definition 65:19 definitions 105:7 degree 126:12,22 deliverable 83:11 demonstration 142:17 Denise 8:16 Denton 1:19 12:14 12:14 35:9 39:19 39:20 40:18 67:7 67:8,12 139:12,12 139:13,14,17 144:13,15 Denton's 69:15	Department 1:1,19 1:22 43:5 44:9 86:2 depend 50:16 dependence 110:6 dependent 49:22 54:9 depending 108:2 depletion 63:11 64:3,13,16 65:5 72:9 depth 61:6,15,18 61:21 62:4,17 65:10 66:18,20 68:6 70:16 71:3 77:19 depths 62:19 Deputy 84:18 describe 142:4 design 75:9 104:8 104:13 107:5,7 108:8 designed 17:15 20:19 designing 104:4 desired 107:3 114:1,4,6 detail 26:20 27:17 details 25:12 120:7 detect 15:17 28:17 40:5 48:13 detecting 40:4,10 detection 3:5 12:6 13:8,17 14:2 17:14,19 18:12,16 19:16 20:4,13 21:2 22:5 25:1,15 28:20 29:1,21 32:5,22 34:6 36:21 37:11 39:21 45:1 46:20 48:14 determine 61:6,21 62:5 106:1 107:1 110:7 112:14 113:7 114:4,13 determined 31:20 46:16 47:11 113:5	115:6 116:13 118:20 determining 112:5 115:11 develop 18:1 55:2 86:17 93:4 109:20 110:4 developed 49:15 89:22 development 18:21 46:14 54:21 78:14 92:3 107:16 109:16 devil 25:12 devil's 120:6 de-rate 108:18 dialogue 5:6 33:18 122:3 diameter 114:16,18 differ 28:5 differences 25:11 49:16 different 11:7 29:18,20 30:3 41:4,5,7 76:8 99:22 100:2 111:17,18 113:10 114:21 138:1,2,3 138:9 140:21 143:8,10,10,11,11 143:12 differently 114:22 differing 22:13 difficult 106:15,20 144:8,10 dig 92:4,7 132:13 132:15 digest 127:9 dioxide 65:1 directed 101:11 direction 137:10 directly 23:17 45:8 94:17,22 Director 55:13 disagree 134:2 disagreement 26:1 discharge 48:6	disciplinary 106:22 discreet 21:18 discretion 35:5 discuss 45:17 47:21 49:3 60:1 discussed 47:14 48:15 50:3 94:6 discussion 3:6,11 3:15,20 14:8 67:18 79:10 116:21 120:6 122:6 127:19 128:3,13 130:8 136:5 143:15 discussions 16:11 119:9 121:21 124:16 126:14 134:19 142:9 dispatch 94:19 distance 50:19 distributed 64:8,20 distribution 16:21 27:13 134:16 Division 13:13 docket 10:5,9 dockets 76:14 documenting 112:19 documents 110:18 doing 33:17 82:16 98:21 135:4 137:5 140:12 dollars 68:7,17 domain 135:7 dominantly 134:15 door 118:8 doors 96:6 doosey 90:7 DOT 81:20 DOT's 4:6 doubt 138:7 Doug 13:4 downs 41:8 downstairs 10:17 Dr 21:16 draft 14:12,13 23:6 33:1 38:19 40:20	47:5,15 54:22 57:21,22 58:10 67:9 draw 43:17 drawing 7:11 97:4 drive 119:7 136:17 driven 67:13 110:22 123:3 136:14 137:2 drivers 14:3 drives 115:4 driving 137:9 144:6 dry 71:4 due 54:11 61:11 65:3,11 dumped 73:5 dynamic 63:15
E				
				ear 94:16 earlier 123:8 early 83:10 145:12 easier 10:10 easiest 93:20 easily 76:13 93:22 easy 98:2 101:17 106:12 119:22 economic 15:22 42:20 51:13 economically 44:13 52:18 55:7 economics 22:12 edge 76:7 Edison 1:13 educate 80:10,11 103:5 Educating 81:10 effect 52:21 effective 35:17 38:3 53:6,10 88:15 103:5 130:22 effectively 96:12 115:19 effectiveness 17:14 35:14 42:14 49:17 51:1

<p>effects 50:10,16 53:22</p> <p>effort 141:4</p> <p>efforts 54:2 78:17 79:9 131:5 145:8</p> <p>eight 39:13 48:1</p> <p>either 41:17 81:11 90:11</p> <p>elaborate 116:16</p> <p>elected 6:6</p> <p>element 20:18 29:14 32:1,2</p> <p>elements 15:22,22 16:1 21:18 25:9 105:9 106:5 109:6 138:16,19,19,20</p> <p>eluded 95:13 123:13</p> <p>email 23:12</p> <p>emergencies 94:5</p> <p>emergency 3:13 28:6 35:18 53:14 54:3 78:11,18,19 79:3,4,9,15,17 80:1,2,11,16,18 81:2,4,7,11,16,19 82:2,9,14 83:6,18 84:3,11,17 85:8 85:12,13,15,17,22 86:2,3,13,16 87:8 88:2,12,16 89:4,6 90:9,13,17 91:5,9 91:12,20 92:6,12 92:17,18 93:5,10 93:12 94:1,13 96:1</p> <p>emergency's 83:12 91:10</p> <p>employee 140:18</p> <p>enable 53:14</p> <p>enactment 61:12</p> <p>encompass 79:2</p> <p>encourage 85:11 120:5</p> <p>endeavors 7:6</p> <p>ended 19:13 140:1</p> <p>endorsement 35:4</p>	<p>energy 43:6 81:15 100:17</p> <p>Energy's 43:5</p> <p>enforcement 143:17,20 144:11</p> <p>engage 78:17 96:1</p> <p>engaged 85:3 88:6 96:3 124:2 127:17</p> <p>engineer 30:1 145:21</p> <p>engineering 13:13 15:1 50:6 106:1,6 107:1 115:3 118:6 131:14 140:4</p> <p>engineers 43:13</p> <p>enhances 116:1</p> <p>enhancing 81:7</p> <p>enormous 36:20 75:13 129:18</p> <p>ensure 65:8 82:19 93:8</p> <p>entertain 33:4</p> <p>entire 57:9 73:2</p> <p>entirely 120:14</p> <p>entirety 24:5</p> <p>environment 20:15 38:8 42:8,18 53:2 104:10</p> <p>environmental 50:12,14 51:5 53:5 54:5 104:17</p> <p>environments 143:11</p> <p>EPA 51:21</p> <p>equal 62:12</p> <p>equally 25:2</p> <p>equipment 107:2 115:12 143:11</p> <p>equivalent 32:15 44:12</p> <p>erosion 75:10,14,15 75:20</p> <p>errors 26:2,6</p> <p>escaping 53:1</p> <p>especially 92:3 106:11</p> <p>essential 44:2</p>	<p>105:8</p> <p>essentially 69:6 112:18</p> <p>establish 51:18 104:5 112:15</p> <p>established 43:3 104:15 110:12</p> <p>establishes 114:1</p> <p>establishing 15:20</p> <p>estimate 49:13,21</p> <p>estimates 49:6</p> <p>estimating 48:7</p> <p>estimation 51:20</p> <p>et 15:18 25:10 29:9 32:4</p> <p>evaluate 62:3</p> <p>evaluated 51:7,16</p> <p>evaluates 42:19</p> <p>evaluation 106:1,7 111:10 113:1,6 114:9 137:16</p> <p>evaluations 135:10</p> <p>evenly 64:8,19</p> <p>event 81:16</p> <p>events 50:18 67:14 81:12</p> <p>everybody 60:13 137:20</p> <p>everyone's 97:10</p> <p>everything's 21:13</p> <p>evolve 53:19</p> <p>exact 28:4 50:6,17 66:9</p> <p>exactly 103:20 104:2</p> <p>example 82:17 95:16 108:9 113:4</p> <p>examples 103:14 103:16 112:9 119:18</p> <p>exceed 48:19</p> <p>exchange 17:17</p> <p>excluded 113:16</p> <p>executive 24:17</p> <p>exist 142:6</p> <p>existing 18:17 22:17 46:3 57:12</p>	<p>82:7 86:17,20 87:5 99:15</p> <p>exists 82:13</p> <p>exits 11:5</p> <p>expand 34:12 40:15 48:14 106:9 121:20</p> <p>expanded 32:19 91:14 110:19</p> <p>Expanding 106:21</p> <p>expensive 68:11</p> <p>experience 15:1 72:3 74:17</p> <p>expertise 32:10</p> <p>explicitly 16:16 17:2 23:7</p> <p>explore 132:16</p> <p>exploring 97:12</p> <p>exposed 71:15 77:12</p> <p>extent 16:6,14 107:18</p> <p>external 28:22 32:14,15</p> <p>extreme 67:16</p> <p>extremely 49:4 79:8 83:16 96:17</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>face 80:18 82:8</p> <p>facilitating 86:15</p> <p>facilities 43:16 100:4 111:3</p> <p>facility 44:20</p> <p>facing 99:3</p> <p>fact 25:19 30:1 59:20 143:19</p> <p>factor 61:7,16 63:13,18 64:4,14 64:16 65:5 70:17</p> <p>factored 59:15</p> <p>factors 45:12 50:18 108:1 112:19 113:18 138:1</p> <p>failure 48:10 52:21 68:11 112:20 125:2,4</p>	<p>failures 64:3 79:14 125:1,10</p> <p>fair 23:5</p> <p>fairly 40:8 64:8,19 71:5 74:20 119:19 127:16</p> <p>fall 37:19 124:8</p> <p>falling 52:8 142:11</p> <p>false 18:15 19:17 31:2,5,6,10,14</p> <p>familiar 15:7 21:10 33:22</p> <p>far 16:12,16 24:18 40:10 117:16</p> <p>fast 71:10 72:10 101:19</p> <p>fatalities 50:13</p> <p>fatigue 112:6</p> <p>FDIC 89:13</p> <p>feasibility 16:1 22:9,11 42:21 51:13</p> <p>feasible 44:14 52:19 55:8 121:15</p> <p>features 50:22</p> <p>federal 45:20 46:9 117:7,10 131:9</p> <p>fee 94:21</p> <p>feed 135:17 136:5</p> <p>feedback 83:20</p> <p>Feel 93:17</p> <p>feels 73:4</p> <p>feet 61:3 62:12,21</p> <p>Felt 1:20 7:22 12:16,16</p> <p>FFS 111:13 115:9 116:1,13</p> <p>FFS-1 110:17 111:8,14</p> <p>Field 60:14</p> <p>Fifty 64:20</p> <p>fighths 118:9</p> <p>figure 31:9 77:6 102:4 136:16</p> <p>file 34:17</p> <p>filed 142:14</p> <p>filled 91:8</p>
--	--	---	--	--

final 33:1 38:12,13 38:17 49:2 54:22 55:2 57:21,22 58:1,3,4,10 74:7	126:4,11,14,20 127:11 128:15 138:19 139:20	74:14 76:2 77:21 78:4,9 94:7 95:11 98:6,9,12 116:18 118:11,21 119:4 120:10 125:18 127:1 128:4 130:15 136:8 137:11 139:7,10 139:13,15 141:6 144:13,16,22 145:5,17 146:4	113:1 141:10 future 59:15 84:6 93:12	78:22 113:12 135:18 given 36:19 67:21 101:7 112:14 124:21
finally 28:15 122:21	fits 138:21 five 41:3 64:17,18 75:17 114:7 115:2	foregoing 78:6 form 18:21 112:17 formed 15:12 former 70:16 84:19 formerly 59:1 forming 14:8 forth 83:19 84:3 100:20	<hr/> G <hr/> game 73:15 GAO 44:22 59:3,5 59:16 101:8 gap 46:17 125:7 gaps 18:12 19:12 87:4 91:4,7 Gardner 6:15 gas 3:9 6:16 16:19 16:21,22 25:2,11 27:10 28:21 29:3 42:7 44:14 49:14 50:3,11 51:3,7 52:10,16 57:15 99:9	gives 90:2 giving 115:20 glad 143:19 go 5:12 6:16 10:10 13:7 16:15,16 21:22 22:6 23:21 24:9 26:19 27:1 28:4 30:8 56:21 57:2 60:9,22 63:9 68:16 69:18,19 73:1 76:11 77:6 77:16,22 78:21 87:20 93:20 100:14 108:11 117:16 120:17 125:8 129:7 130:6 131:5,16 132:11 132:20 138:11 140:16 143:3,7
final's 38:20	fix 101:19 102:9	forum 17:16 18:9 19:15,21 29:15 31:12 46:14,22 54:19 81:20	gather 97:7 gauges 27:16 gear 98:1,3 general 14:16 17:10 18:17 19:17 20:13,22 21:5 22:1 26:5 27:21 28:5 29:1 31:13 31:14 99:5 111:5	goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
find 63:1 66:4 75:6 124:22 141:17	fixed 27:9	found 26:2 46:7,22 62:8 63:6 65:4 90:17 110:16 134:8	generally 21:22 103:4 110:10 114:7 generate 46:11 generated 100:9 generating 31:2 generation 100:6 100:16 Georgia 85:21 88:5 88:7 89:3 95:16 German 40:22 Germans 41:2 getting 96:20 99:16 116:20 118:8 121:21 126:16	go 5:12 6:16 10:10 13:7 16:15,16 21:22 22:6 23:21 24:9 26:19 27:1 28:4 30:8 56:21 57:2 60:9,22 63:9 68:16 69:18,19 73:1 76:11 77:6 77:16,22 78:21 87:20 93:20 100:14 108:11 117:16 120:17 125:8 129:7 130:6 131:5,16 132:11 132:20 138:11 140:16 143:3,7
finding 35:18	flaw 106:3 109:18 110:2	found 26:2 46:7,22 62:8 63:6 65:4 90:17 110:16 134:8	GIS 63:2 gist 49:11 give 10:5,8 12:3 14:2 33:16 35:7	go 5:12 6:16 10:10 13:7 16:15,16 21:22 22:6 23:21 24:9 26:19 27:1 28:4 30:8 56:21 57:2 60:9,22 63:9 68:16 69:18,19 73:1 76:11 77:6 77:16,22 78:21 87:20 93:20 100:14 108:11 117:16 120:17 125:8 129:7 130:6 131:5,16 132:11 132:20 138:11 140:16 143:3,7
findings 34:14 59:21	flaws 107:4,14 115:11	four 67:19 91:15 121:19		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
finds 61:15	flight 106:17	frames 106:11		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
fine 98:9	flood 19:19 63:12 63:16	frankly 10:11		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
fire 1:18 11:5 49:6 49:14,19 50:1 51:17 53:11,13,20 53:20 83:8,10 85:9 87:12 89:12 89:18 97:22	floods 63:21 72:5 72:6 76:21	free 93:17		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
firefighting 53:15 53:19	floods 72:17	frequently 74:20		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
fires 80:4	flow 27:15 48:18,19 112:18	friends 5:19 133:14		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
firm 141:22	flux 43:21	front 73:5 127:17		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
first 12:5 35:18,22 40:5 47:19 55:22 56:8 60:20 61:10 62:1 68:21 70:22 80:10 81:14 82:6 86:11 90:15 92:6 105:3 109:7 112:9 116:15 123:10 133:13 139:18,20 139:20 144:20	focus 17:9 40:6 66:16,17 82:3 84:16 88:15 123:15 132:12,20	frost 138:7,8		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
fit 8:12 102:16 105:2 106:17,22 107:2,17 112:10 113:22 114:10 118:14,18 137:17 137:21 139:3 143:14	focused 13:21 18:12 20:10 27:10 79:7 81:16	fully 43:1 51:15 52:16 55:6 104:9 134:4		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
fitness 3:17 98:13 102:18 103:1,11 103:17 105:4,18 105:19,20 106:2 109:6 115:17 117:8 118:19	following 24:5 43:19 48:20 51:16	funded 92:21		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3
	Ford 1:14,17 4:17 5:17 6:3,8 11:11 13:6,11 33:6 34:10 35:8 37:4 38:9 39:19 41:19 41:22 55:11 57:5 57:18 58:7 60:5,9 65:14 67:7 68:20 70:2 71:6 73:8	further 108:7,12		goal 7:18 61:5 80:7 123:17 goals 79:12 80:16 83:4 88:14 goes 31:6 33:15 38:5 58:5 going 6:5,16 17:8 33:19 34:20 37:19 39:1 41:17 58:4 64:7 66:16,17 68:21 71:18,21 74:8 77:5,20 78:22 79:2 81:8 89:5,21 95:13 97:21 99:10 108:19 114:9 117:1 120:6,8,22 121:15,19 122:18 125:16 126:21 129:3 130:8 134:11 135:20 139:19,19 141:17 143:1,1 145:3

146:2,2	growth 99:8	89:16 93:16	holiday 98:22	ignores 49:7
good 4:3 10:19 11:4	guess 31:16 118:11	HCA s 44:21	home 43:14	III 1:22
11:12 20:5 23:5	125:22	HDAs 52:4	honestly 34:19	Illinois 5:17 6:6
24:13 32:6 35:7,7	guidance 11:7	head 87:13	38:21 77:16	55:14,18 120:11
39:22 42:1 60:12	111:10	headquarters	Honorable 5:17	illustrate 103:17
66:16 74:2 75:3	guide 46:5 93:5	81:21	6:12,12	illustrative 103:15
78:12 82:17 84:5	Guidebook 91:13	health 18:22	hope 59:7 65:2	imagine 67:4
88:20 92:19 96:7	guillotine 37:22	hear 38:13 66:19	144:20	immediate 25:15
98:16,17 100:14	52:4	127:14 128:13	hopefully 39:10	52:11 59:13
100:16 110:10	guy 9:3	heard 9:15 83:21	60:3 136:6 138:22	immediately 48:20
112:9 118:4		hearing 21:17	hoping 57:19 59:16	53:16 102:10
119:19 122:12	H	36:18	horizontal 75:15,19	immense 99:7
124:5 127:8	half 64:6,11 76:5	heat 111:6	hosted 81:12,19	immensely 96:9
128:19 129:7	81:13	heave 138:7,8	82:2 89:9	IMP 122:11,12,15
130:17 131:16	Hall 2:12 78:11,12	heavily 56:22 88:1	hostile 111:6	123:22 124:8
136:4 140:9,17,20	78:13 94:8,12	88:6	hosting 80:12 81:3	126:16 127:7,10
142:19 143:15	98:4,7,7,8,11	held 46:14	hot 82:1 89:11	129:1 132:20
144:2,4 145:2	Halmerson 87:14	hell 97:2	Houston 82:2	134:6 136:13
goodbye 145:3	Hamsher 8:16	hello 7:1	89:11	137:17 139:1
Google 93:21,21	hand 11:9 100:17	help 6:15 30:19	huge 80:17	impact 21:9 53:4
gotten 39:3 83:20	happen 21:12 72:7	46:5 81:22 87:21	hundreds 134:7	92:6
government 10:20	109:18 125:4	92:16 93:5 97:6	HVLs 64:18	impacts 50:14
18:8 37:13 44:18	135:20 143:1	103:17 124:12	hydrostatic 104:5	imperative 108:8
46:13 59:1,2 66:3	happened 26:22	132:14 141:3	111:22 112:15	implemented 29:21
133:19	30:13 72:10 96:14	144:12 145:6	113:3,8	implication 56:20
gracious 145:7	happening 14:9	helped 15:8	Hypothetical 52:14	122:21
grant 93:1	79:3,11 95:18	helpful 29:15 96:1		implications 35:2
Grants 92:9	126:10	96:17	I	56:17 57:1 59:14
graph 87:7	happens 30:12,17	hey 19:2 77:11	idea 30:11 77:14	71:22 73:3 77:19
grappled 62:13	72:22	100:11,18	85:6 87:2 134:18	important 7:10
great 9:3 55:18	happy 5:9 76:15	He'll 123:19 145:21	ideal 103:20,21	9:20 10:15 32:9
67:6 81:18 83:20	hard 100:12 114:19	high 45:10 48:9	ideally 30:12	39:4 67:15 74:11
84:4 87:20 91:1	136:22	61:3,3 62:13,14	ideas 87:20	74:13 80:2 107:12
97:21 98:4 129:6	hazard 49:3 75:14	62:21,21 63:2	identified 18:13	109:11 122:3
greater 16:10	85:10 92:1,2	69:2,5,5 132:19	36:9 46:1 69:11	123:8 125:15
26:19 62:12 69:10	hazardous 1:3,7	highlighted 16:3	91:4 116:8 117:9	140:3
greatly 116:1	3:9 4:6 42:6,16	95:21	identify 28:8,13,17	impressed 137:8
gross 64:2,21	44:14 47:22 48:18	highlights 89:22	70:9 86:8 91:17	improve 78:19
ground 28:10,12	50:11 51:3,8,10	highly 64:9 127:4	130:13 132:14	85:21 90:11 97:13
104:3 112:4	51:22 52:10 54:6	hill 39:11 59:12	identifying 35:13	115:19
118:13 132:6	61:1,8 62:9,18	60:4	35:14,17 49:16	improvement
group 18:13 46:14	63:6 70:19 84:14	histories 143:12	75:5 86:15 129:20	140:14
82:3 85:1,17 86:4	92:22 103:21	history 73:16	130:11	improvements
86:5 87:8,19,22	111:20 115:14	112:20	ideology 109:15	18:16 136:15
88:10,11 135:14	hazards 85:14	hit 76:21	ignition 51:8,9,11	improving 17:13
135:15	104:10	hits 144:1	51:19 52:1,7,12	inaccurate 48:1
groups 18:10	HAZMAT 89:13	hold 124:7	54:7	inadvertent 47:19

inappropriate 49:5	140:12,19,22	installing 42:22	115:2	58:8 71:6 76:3
incentive 140:21	industry's 40:3	45:4 53:5	interview 22:19	78:1 101:5 119:5
incentivized 68:14	68:8 144:9	instance 26:9	23:3	120:12 127:1
inches 62:19	inferences 119:22	instances 68:13	introduce 6:19 7:2	132:1 141:7
incidences 124:22	inform 9:19 71:20	121:3	98:14	144:18
incident 15:8 21:14	informal 4:15	Institute 43:9 85:9	introduced 84:20	Jerry 87:12
27:22 30:12 36:7	information 9:19	institutionalize	introductions 3:4	job 5:22 44:8 75:3
96:15	17:17,22 29:11	79:19 82:20 87:3	12:7	98:10 129:6
incidents 21:8 22:5	40:10 78:17 79:1	institutionalized	invaluable 96:9	John 8:19 11:6
26:17 61:1	88:21 91:6 92:19	80:6 83:1	inventory 86:17	John's 9:3 145:20
include 20:14	93:9,17 94:5 97:3	institutionalizing	87:1	join 7:5
65:22 75:22 92:12	97:8	79:16	inversely 36:19	joined 5:16
included 27:9	informed 76:8	institutions 82:12	investment 32:3	joining 8:8
58:12 69:13	91:21 97:6 124:11	insured 52:8	36:20	joint 6:13 11:18
113:11	infrastructure 99:4	integral 43:4	involve 25:9	judgement 118:6
including 6:19	99:8,15 100:13,17	integrally 127:6	involved 18:14	judgements 133:9
32:20 97:10	139:4	integrating 114:12	34:9 45:18 57:1	July 18:7,7 22:7
103:12 143:22	INGAA 81:15	integration 43:20	70:8 95:15 128:7	46:12
Incorporated 1:21	87:16	integrity 106:2	128:10	June 86:5
increases 54:7	inherent 49:8	112:1 113:21	involves 38:7	
100:22	85:14	115:6 117:17	involving 52:4	K
independent 135:3	initial 75:9 120:16	126:3,6,16 128:16	isolate 54:7	Kai 13:16
135:15,22	120:17	130:21 131:12	isolated 53:1,12,18	Keenan 65:15
independently	initiative 97:4	133:1 138:20	isotope 43:22	Keener 2:13 60:11
118:2	140:13	142:15	issue 24:21 31:3	60:12,13 66:1
index 94:3	initiatives 14:7	intelligent 9:15	101:18 131:18,19	67:1,10 69:3
Indianapolis 89:14	80:8	intend 124:7	134:5	70:15 77:22
indicated 47:3 56:7	injuries 50:13	intended 21:7 50:5	issues 71:2,21	keep 56:15 82:21
115:3	inland 61:2 62:9	103:10 105:10,12	74:12 76:8 77:9	97:12 134:18
indicates 55:4	63:4,7 65:6,18,19	108:20 109:2	80:2,17,21 92:11	144:5,10
individual 23:15	66:12 67:3,3 69:7	intent 57:2 110:19	92:13,17 99:2,5	keeps 5:20 119:16
50:20 137:22	70:19	interest 89:19	99:13 101:22	key 79:7 82:4,18
individually 102:1	INPO 135:14	128:15	102:6 128:8 138:4	83:11 105:18
industries 82:15	input 18:5 19:7	interested 17:20	138:9	106:5
106:8	46:4 54:18 124:6	75:21 96:11	issuing 100:10	Kieba 2:14 13:8,10
industry 12:15,17	inside 4:21 25:17	interesting 74:16	item 12:5 13:7	13:12 33:10,21
12:19,21 18:8	52:22 130:2,4	74:22 75:6 145:15	60:10 78:10 98:13	35:21 36:4,16
32:17 36:20 37:13	inspect 106:12,20	interests 97:11	98:13	38:5,16 40:17,19
46:13 70:13 74:18	inspection 106:16	intermediate	items 15:16	41:20,21
75:3 76:1 77:8,16	112:4 132:19	102:12		Kiefner 13:15
79:8 82:17 85:2	inspections 131:8	internal 32:13	J	14:17,19 15:4,21
86:12 88:3 103:4	inspectors 132:4,5	135:2,10	Jacinto 63:22	16:4
103:13 111:21	132:12	International	January 22:7 33:13	kind 19:14 21:21
115:14 116:15	installation 57:9	89:12	101:6	22:1 23:18 26:22
118:2 128:9,17,19	installed 22:9	interval 108:17	Jeff 1:17 4:4 11:12	29:16,17 30:19
129:19 130:3,4	45:10 52:15 55:5	114:2,4	13:11 34:10 38:16	40:7 41:16 70:6
136:10,15 139:14	75:7 106:19	intervals 45:12	55:13,19 56:7	72:22 73:4,11,12

95:14 119:21 122:10 141:8 kinds 90:22 91:19 143:10 knew 96:5 104:2 know 8:14,15 10:20 11:4 14:17 20:22 21:4 26:20 27:15 31:21 32:10,11 34:19,22 35:3 36:7 37:16 39:11 39:13 56:14 59:16 59:19 64:17 66:9 66:10 67:17,18 68:6,10,17 71:9 71:11 72:2,8,12 72:16 73:2,4,6 74:7,17,17 75:12 76:6,16,17 77:2 77:12 86:22 91:7 93:14 94:14 95:5 95:12,15,17 96:3 96:6,13,16,18,21 97:7 99:2,6 100:7 100:7,9,15 102:14 102:15 103:2,22 104:21 105:1 107:16 108:9 110:3 118:9 120:20 121:3,7,8 121:13,18,22 122:9,9,11,20 123:9,15,21 124:4 124:11,20 125:5,7 125:12 126:6,8,13 127:4,7,11,12,15 128:6,8,22 130:7 130:16,18 131:10 131:11 132:8,13 132:17 133:9,13 133:20 134:15 135:6,8,14 136:6 137:13,16 138:3,6 138:15,18 140:11 140:12,13,15 141:12,13,22 142:5,10,14,21	143:1,4,12,14,16 143:18 144:1,2,5 145:16,22 knowing 109:14 110:5 known 7:6 8:1 43:9 110:17 124:3 knows 6:20 Kuprewicz 1:21 12:22,22 38:9,10 73:8,9 116:19,20 117:14 125:19 <hr/> L <hr/> laboratory 3:8 42:4 42:11 43:3,6 44:1 lacking 28:21 land 92:3 Landon 2:16 13:9 13:18 41:20 42:1 55:12 56:6 57:14 58:1,6,13 60:6,7,8 language 25:8,14 33:22 141:18 Lanny 1:18 8:10 12:9 57:6 87:10 97:16 Lanny's 58:17 large 36:10 37:22 38:1 40:6 114:18 126:22 larger 122:5,8 largest 32:2 43:5 Larry 1:23 8:18 12:20 55:19 87:14 102:22 103:7 136:10 140:3 144:17 late 39:14 laugh 97:16 layer 69:6 layers 21:4,16 LDS 17:19 20:8 21:6 22:17 29:5 32:13 38:6 lead 14:21 69:12 leadership 85:7	leads 108:5 League 7:10 leak 3:5 12:6 13:7 13:17 14:2 16:20 17:14,19 18:12,16 19:16 20:4,13 21:2 22:5 25:1 28:20,22 29:20 30:14,16 32:4,21 34:6 35:14,15 36:21 39:21 40:5 45:1 48:8 leaks 15:18 33:4 35:17,18 37:7,8 37:12,15,19 40:6 40:11 91:17 learn 98:1 learned 82:5 learning 97:14 leave 25:8 led 88:9 left 8:21 lemon 120:4 Lesniak 1:22 7:4 13:4,4 35:8,10,11 36:2,14,17 58:7,9 58:14 70:3,4 74:14,15 128:5,6 lesson 82:18 lessons 81:18 82:4 letter 34:18 letter's 34:20 letting 145:11 let's 17:11 101:4 level 27:1 73:20 84:17 86:13 88:16 92:2 106:2 108:21 114:6 120:22 142:3 levels 31:2 leverage 82:7 86:19 Liability 43:7 liberty 5:7 7:16 59:22 life 110:7 114:5 115:12 144:8,9 light 145:12	liked 16:17 40:9 120:16 limit 57:13 limitation 37:11 limitations 15:17 49:21 limited 22:22 43:7 52:3 123:12 132:2 limits 114:22 Linda 2:11 98:13 98:14,17 103:9,10 123:2,13 130:15 134:5 137:12 144:17 Linda's 127:2 143:5 line 1:23 19:1 45:22 46:20 57:10 72:15 77:11,13 96:19 113:20 lined 21:13 lines 48:19 51:7,9 51:11,15,19,22 52:11 66:4 72:18 74:21 75:4,7 76:19 link 24:2 57:21 94:1 95:8 links 40:4 90:2 94:4 liquid 1:6,7 3:9 4:19 11:13 13:21 17:9 25:11 29:2 42:2,7,16 44:14 47:22 48:18 50:11 51:4,8,10,22 52:10,17 54:6 57:17 61:1 62:9 62:18 69:8 103:21 111:20 115:14 liquids 25:17 61:8 63:6 64:10 70:19 list 39:18 listed 19:12 45:13 79:12 82:4 lists 90:7 little 9:6 14:3,10 15:11 20:7,8 22:3	32:1 34:8 40:9 63:19 64:4 66:11 102:22 112:2 113:10 140:8 145:11 LLC 1:19,23 local 79:15 84:17 85:12 88:16 92:2 location 45:2 52:13 54:11 locations 45:11 62:8 69:10 Logistics 1:23 12:21 long 73:16 76:20 78:1 110:13 124:2 125:17 128:9,11 129:8 longer 42:10 60:19 115:2 longest 83:5 look 17:11 34:7 37:17 38:20 58:21 59:3 64:15 69:18 74:8 100:12 117:4 117:20 124:15,18 130:18,19 131:11 131:15 132:7,11 136:10,13 137:15 138:1 143:7 145:19 looked 15:21 16:4,6 22:2,8,10 40:19 40:21,22 63:19 99:2 looking 16:9 59:6 66:15 69:21 70:1 73:14 74:19 75:1 126:15 129:3 133:4 139:15 looks 38:10 98:2 lost 24:13 lot 15:8 17:21 25:3 38:11 60:18 67:14 67:18 68:4,8 69:16,16,19 72:4 74:3,4,18 75:18
--	---	--	---	---

76:6,20 77:4,9 81:18 90:7 95:13 96:5 97:20 99:6 99:14 100:3,8,9 100:19 101:13,13 110:12 114:19 116:21,22 117:15 122:13 124:4,16 127:14,18,20 128:1,13,18 130:19 132:6,7 134:13 137:2 141:16 love 135:19 lower 114:17 lowered 75:8 lowering 74:21 lucky 88:22 Lula 1:14,17 4:16 5:17,19 6:18 11:9	130:21 131:12 133:1 134:22 135:3,11,18 138:21 141:16 142:16,16,19 manager 15:4 managers 92:16 mandate 15:13 33:11,13 44:7 58:18 59:7 60:17 61:10 62:16 67:2 71:5 72:20 mandates 14:5 39:13 44:17 54:17 59:10 71:12,14 101:6 123:3 Manhattan 43:4 manner 111:16 manufactured 104:1 manufacturers 29:10 manufacturing 104:13 mapping 66:2 90:16 91:1 Marathon 1:23 12:19 March 17:13 42:10 45:14 54:16 mark 61:3,4 62:14 62:14,21,22 63:3 69:2,5,5 Marshals 83:8,10 Martin 15:3 mass 48:9 massaging 64:4 Massoud 1:24 8:6 12:11 33:7 38:22 134:17 Massoud's 95:17 material 43:20,22 materials 1:3 4:6 84:15 85:4 92:22 99:22 matter 78:6 79:22 80:3 83:2 139:22	146:6 matters 80:5 Max 2:14 13:8,12 33:8 34:13 35:1 47:3 48:14 maximum 104:6 112:16 Mayernik 15:6 McLean 123:18 mean 38:21 73:6 76:18 96:11 97:16 120:19 130:1,1 138:8 143:20 means 22:14 82:6 101:12 102:19 105:5 138:10 meant 71:10,20 72:19 measurable 32:21 41:12 measurement 108:3 110:1 111:18 113:13 115:20 measures 29:6 30:21 mechanisms 109:8 109:12 110:11 111:4,9,17 114:13 114:16 115:1,16 medical 106:18 108:10 meet 72:20 107:5 128:20 meeting 5:4 8:16 11:10,13,18,19 81:14 102:21 123:15 146:5 meetings 5:21 9:21 80:13 89:1 99:18 124:7 145:21 member 28:6 members 12:8 14:19 15:5,11 87:7,9,10 95:20 102:22 116:15 127:16 145:10	Memorial 43:9 mention 84:8 94:12 mentioned 8:15 9:7 17:2 27:7 83:2 91:11 103:19 108:9 110:15 132:1 met 1:13 143:22 metering 25:10 method 30:17,18 55:9 methodologies 41:4 41:9 124:19 methodology 31:7 41:7 48:6 methods 29:21 30:3,13 41:4 107:14 111:17 metrics 29:17 51:18 middle 18:7 66:22 98:19 Midwest 89:15 mild 114:16 miles 132:5 million 132:5 mind 144:10 minimize 46:21 minimum 114:1,6 117:10 Minnesota 138:5,6 minute 48:2 78:20 minutes 53:18 106:10 missed 55:22 68:22 138:14 missing 27:2 mission 134:3 mistaken 41:3 mitigate 53:7 mitigating 42:15 49:18 51:2 53:10 mitigation 85:10 92:1,2 model 21:10 49:6,9 51:20,21 57:16 88:17 115:10	125:3,6,9 modeled 52:9 modeling 15:2 51:17 54:9 77:3 models 48:5 49:1,4 49:12,21 50:5 82:16 135:11 modes 84:14 modifications 25:22 58:11 modified 138:11 modify 25:14 82:13 108:22 molecular 43:21 moment 6:22 127:9 money 68:8 monitor 108:16 monitoring 27:15 month 39:13 months 86:6 MOP 114:20 MOPs 104:14 morning 11:12 mouthful 42:9 move 40:12 59:10 66:14 109:4 126:13 129:1 moved 25:5 moving 8:17 50:8 multi 61:9 106:22 multiple 18:14 21:4 21:12,16 23:13 68:3 81:12 89:9 multi-day 124:7
<hr/> M <hr/> M 1:14,17,23,25 Magellan 8:18 magnitude 50:15 maintained 54:20 maintaining 45:19 100:3 105:11 maintenance 104:8 major 58:21 91:2 91:18 96:15 majority 37:5,7,19 making 39:2 100:4 105:13 109:13 110:8 111:11 112:13 115:4 116:12 133:2 MALE 39:15 manage 32:4 managed 43:7 management 85:8 85:12,13,15 86:2 111:1 112:1 113:21 116:2 117:17 124:2 126:3,6,17 127:21 127:22 128:16				<hr/> N <hr/> name 12:1 13:12 59:3 nameplate 29:5 name's 4:4 60:13 nanophase 43:20 narratives 63:15 NASFM 87:13 national 3:8 7:9,14 42:4,11 43:2 44:3 44:4 60:14 83:7 84:22 85:9 88:11

89:10 90:16,22 94:13 natural 3:9 16:20 42:7,16 44:14 49:14 50:3,11 51:3,7 52:10 Naturally 21:7 nature 23:17 63:16 119:10 nearest 45:2 necessarily 74:9 133:19 necessary 110:7 need 30:18 31:21 78:20 80:6,20 82:10,11,12,19,22 87:4 99:13 100:11 102:2 114:21 122:15 123:15 127:18 128:2 129:11,13,14 131:18,18 132:9 132:15 133:3 136:16 138:5,17 142:6 143:3 144:5 144:11 needed 18:16 69:18 125:13 needs 16:10 68:18 100:20 NENA 94:14 95:21 NENA.org 95:7 neutron 44:1 never 59:3 72:13 new 8:11 9:19 17:3 18:17 57:8 58:21 63:12 68:10 77:2 82:12,12 85:6 86:21 99:10 113:12 119:19 120:1,3 newest 48:12 newly 42:22 44:15 46:3 51:14 52:16 55:5 news 110:10 nice 137:18	night 145:4 nine 23:12 43:16 64:20 101:8 normal 48:19 72:12 note 67:15 notebook 4:22 notice 18:4 notify 19:2 notion 31:1 NTSB 14:5 16:19 33:14 45:5 54:18 96:11 101:10 nuclear 106:8 135:13 number 4:20 7:6 10:9 16:7 18:9 24:21 41:5 48:3 80:13 87:15 105:6 112:6 115:14 numbers 48:1 94:13 <hr/> O <hr/> O 1:23 Oak 3:8 42:4,11 43:2 46:5,8,11 47:4,11,17,20,20 48:4,11,16,20 49:10,13 50:9 51:1 52:2,8 54:15 55:2,4 57:14 objectively 32:2 objectives 30:22 observation 29:3 observations 14:15 14:16 24:16 27:21 28:19 40:17 observed 30:10 obtained 17:22 obviously 22:13 25:11 29:9 37:21 40:4,6 67:13 68:12 90:15 92:4 141:4 occur 130:20 131:1	131:6 occurred 26:11 63:7 64:12 70:7 occurring 21:8 130:2 October 23:8,10 47:4,8,8 63:21 81:22 offer 92:10,19 office 44:18 59:1,2 60:14 78:14 offices 85:12,13 94:19 officially 11:19 Officials 7:15 oh 12:6 35:21 101:18 119:5 128:4 130:6 OIG 101:7 oil 51:20,21 64:7,8 99:9 okay 11:7 30:13,14 33:10 35:10 42:1 47:17 50:8 56:9 57:4 58:14 66:13 67:12 69:14 78:2 78:21 117:14 119:4 139:17 141:10 145:2,5 old 86:6 99:16 119:17,20 older 99:16 104:13 120:4 once 33:1 106:14 106:19 145:7 ones 114:18 131:7 ongoing 83:9 141:5 open 3:20 17:16 96:6 101:10 122:2 operate 100:5 102:15 104:22 operated 112:22 operates 43:16 90:21 operating 20:15 45:19 102:20 104:6,11 107:6	112:16,19 114:1,6 114:17,19 operation 46:18 110:20 119:13 operational 15:22 22:11 42:20 51:12 operationally 44:13 52:18 55:7 operations 83:18 operator 28:10,12 36:3 68:1 96:18 96:22 97:9 128:14 140:20 143:18,21 144:4 operators 22:19 23:1 44:20 45:22 54:2 68:3 69:17 77:11 88:12 91:6 93:6 94:17 128:19 128:20 129:4 130:13 132:19 140:10,10 143:6 144:7 operator's 97:10 133:7 opinion 25:20 29:19 30:4 32:3 32:13,16 41:11 141:22 opinions 22:13 opportunity 5:12 5:13 56:10 90:11 97:13 121:9 opposed 70:12 options 70:14 order 3:3 11:10,20 20:2 86:21 123:11 131:18,19 143:3 organization 84:8 organized 82:1 original 107:7 109:3 110:19 originally 110:22 ORNL 42:12 43:3 43:5,16 ORNL's 42:19 44:6 OSHA 110:22	outcome 128:15 outflow 49:5,13,22 outline 14:1 outlive 137:4 Outreach 89:4 outside 79:11 overall 15:3 21:20 26:15 53:4 142:4 overlaid 66:6 69:7 69:11 overs 80:4 oversee 138:12 oversight 100:22 101:2 131:8 135:2 O-F 3:1 <hr/> P <hr/> P 45:6 page 3:2 24:14 91:15 94:1 pages 91:14,16 paid 93:15 panel 98:14,15 papers 19:22 20:3 47:3 paraphrase 122:10 Pardon 141:15 part 22:18 43:4 62:17 67:1 71:5 97:4 123:21 125:16 130:3,8 145:8 PARTICIPANT 39:15 participating 80:12 participation 9:8 particular 5:22 9:11 92:21 109:17 109:18 113:20 114:14 117:13,19 119:8 particularly 10:16 15:6,16 17:9 27:12,13 29:7 parties 37:16 partner 84:21 partnership 43:7
---	--	---	---	--

83:5,9,11 84:7 85:8 partnerships 80:16 80:20 83:3 87:5 parts 16:2 142:9 party 104:15 Pasadena 1:19 12:10 87:12 Pat 2:16 13:9,18 patrol 28:11 patrols 28:9 37:16 paying 75:4 pending 7:14 people 6:18 7:2,11 8:7 9:15 14:17 15:7 16:17 18:5 20:9,14,18 21:9 22:13 24:18 32:8 32:9 38:7 40:1 43:12 58:18 76:6 80:21 93:10 96:5 117:2,5 119:9,22 122:17 128:17,18 133:21 134:1 135:3 137:4 138:4 140:17 143:12,13 percent 64:1,20 104:2 percentage 36:10 percentages 28:5 perfect 102:13 120:20,21 121:2 perfection 73:15 perform 118:22 140:22 performance 29:6 29:13,17 30:21 32:21 41:12 141:14,18 142:3 performed 106:1 performing 140:20 period 22:22 26:12 26:14 28:3 56:2 105:12 107:3,17 108:20 109:2,19 110:14 114:10 124:21	periods 34:8 permission 37:3 person 5:20 7:22 79:20 139:16 personal 50:12 72:2 74:17 personnel 19:4 32:3 45:3 perspective 21:1 23:4 37:3 69:4 71:8 73:10 74:1,6 85:11 117:19 118:1 perspectives 76:9 petition 6:4 petrochemical 110:16 111:3 petrochemicals 106:9 petroleum 64:9 phase 61:17 Phillips 1:19 12:14 15:3 philosophy 31:8 PHMSA 14:6 42:10 45:7 54:16 60:15 61:17 65:9 75:22 79:8,11,12 81:19 83:6 93:1 93:15,21 95:4 99:12 100:22 101:11 129:3 PHMSA's 10:10 13:12 140:11 PHMSA-2009-02... 10:9 phones 11:21 phrase 137:3 phrases 127:20 physical 30:3 pick 117:3 picked 37:15 picture 76:18 pieced 96:21 pieces 83:22 97:8 100:14 Pierson 1:23 12:18	12:18 68:20,21 69:14 136:8,9,9 139:9 pilot 85:20 86:1 88:5,7 95:17 pinpointing 16:20 pipe 1:23 53:8 100:14 101:20 104:9,12 112:20 113:7 119:10,12 119:15,19,20 132:5 pipeline 1:3,6,7,18 1:19,20,25 4:5,6 8:2 11:13 12:15 12:17,19 13:3,13 17:14 18:9 21:5 22:5 28:13,15 29:5 35:19 42:2 42:17 44:7,19 45:1 46:13 48:10 48:19 49:5,13,14 49:22 51:4 52:3 52:14,21 53:1,11 53:12,17 54:2,6,8 54:10,12 60:15 61:7 64:2 65:22 78:14,19 79:4,14 79:16 81:7,16 82:2,9,14 83:12 83:18,18 85:2,5 85:10,14,16 86:3 86:12,16 88:3,11 90:9,16 91:1,10 91:14,18,20 92:2 92:5,12,17 93:6 93:21,22 94:5,17 95:2 99:4,4,8,15 100:12 104:22 105:1 111:15,20 112:14,22 114:17 115:14 117:7,10 128:7 129:7,10 136:11 pipelines 3:10,12 28:21 42:7 43:1 44:15 46:4 50:11	52:17,17 55:6 57:12 60:10,18 62:9 63:17 64:7 64:22 65:1 66:18 69:8 79:22 80:6 87:3 90:18 91:3 91:21 92:8 93:13 94:20 99:10,20 102:14 103:20,21 103:22 104:18 110:11,13 111:4 pipes 118:12 piping 110:21 place 29:16,17 30:19 76:19 92:6 120:9 140:9 places 115:15 142:7 plains 63:17 plan 32:4 138:21 Planning 91:22 plans 65:8 85:15 130:22 131:12 plant 110:20 platform 86:12,14 play 31:4 please 11:20 12:3 pleased 5:16,22 plus 15:1 101:11 132:4 point 9:16 14:18 21:3 39:22 40:3 40:14 47:3 49:8 50:20 56:16 67:9 76:10 77:17 97:18 97:19 109:21,22 120:20 121:5 126:7 135:9 136:16 138:16 141:11 pointed 18:19 26:3 27:6 72:9 98:20 140:3 points 9:12 10:14 94:19 95:1 120:14 policy 121:21 poor 125:11	populated 88:1 population 45:12 68:22 portion 27:22 34:1 pose 99:13 130:17 position 118:2 positive 52:19 53:22 55:8 possible 118:19 144:3 possibly 118:14,18 post 76:14 posted 47:9 58:5 67:10 potential 42:21 46:16 50:10 51:13 75:10 85:7 129:10 potentially 17:3 53:6 power 106:8 practicable 107:18 121:16 practical 40:10 45:17 practicality 15:20 practice 8:22 32:12 practices 28:20,22 70:10,13 71:2 92:1 141:3 praying 4:10 preceded 142:17 predicated 121:5 predict 75:18 107:15 120:21 124:20 predicted 125:4 predicting 124:19 125:10 presage 121:22 prescribed 111:9 112:13 114:5 142:12 prescribes 114:8 114:12 prescription 141:19 prescriptive 68:5
--	---	---	---	--

126:19 141:14	prioritize 123:16	projects 58:21	punctures 52:6	127:5 130:17
present 1:16 2:10	priority 132:14	prone 31:2	puncturing 72:15	131:2 133:10
11:15 19:5 62:16	private 8:22	prong 61:9,10,14	purchases 98:22	136:4 141:12
presentation 13:20	proactively 77:8,15	62:1,3 70:22	purpose 76:5	questions 33:4,5,6
14:1 24:3 48:15	probably 8:2,15	pronounced 13:16	123:20	41:20 55:10,11
60:16 65:13 78:22	11:5 24:18 37:9	proper 93:10 142:1	purposes 103:15	60:6 65:15,17
89:20 140:4	75:9 77:7,8 93:19	properly 20:20,20	pushed 71:9	77:22 98:6 116:18
presentations 10:4	95:15 97:16 105:3	32:8	put 8:6 10:4,5 19:1	119:5 137:1,12
46:6 81:3 89:8	119:19 121:18	properties 119:11	20:8 23:8 24:19	144:17
presented 22:15	127:3 128:18	property 50:13	36:20 39:8 48:21	quick 9:6 14:1
30:22 47:5 55:1	problem 70:12	proposals 20:5	59:18 89:21 94:15	120:14 133:13
55:16 99:20	119:15 123:5,8	proposed 11:17	100:20 104:3	quickly 25:16
117:21	129:11 130:13	49:3 100:21	105:14 122:5	94:22 96:21
presenter 33:7	problematic 21:20	protected 104:9	131:13 132:10	quite 8:12 42:9
presenting 24:7	problems 50:7 82:8	Protection 1:22	P-R-O-C-E-E-D-...	76:16 86:7 133:15
34:13	86:9 96:18 118:10	provide 5:2,11	4:1	144:3
President 8:1	130:11	17:16 29:10 52:19	P-11 16:19	quorum 11:15
presiding 1:15	procedures 20:15	55:8 62:2 65:7	P-12-7 17:4	quote 118:6
press 94:11 95:6,8	20:21	76:12 78:16 101:2	p.m 1:14 4:2 78:7,8	
pressed 38:11	proceeded 63:3	provided 19:6 24:2	146:7	R
pressure 104:5,6	process 20:15,20	26:2 93:2		radiant 50:1
104:11,18 108:11	73:2,11,17,22	provides 115:1	Q	radiation 49:6,8,14
110:20 111:22	74:3,11 111:1,10	providing 111:13	QMS 127:21	53:13
112:15,16 114:17	112:13 113:6	PSAPs 94:19 97:14	qualitative 116:7	rail 84:15
114:20	123:22 137:4,18	public 5:6,12,13	quality 104:2	raised 24:21
pretty 9:15 16:8	137:19 138:10,20	9:10 12:10 13:1,3	127:21,22	rapid 53:22
22:21 23:16 26:6	139:3	13:5 18:4 24:9	quantifiable 118:7	rapidly 128:11
26:13 59:18 70:21	processes 137:16	28:7 35:19 37:14	119:2	rare 67:15
71:4 72:10,16	produced 50:2	42:8,17 45:20	quantification	rarely 143:22
88:19 105:8	53:13	50:12 51:4 53:5	116:3	rate 29:6 48:9,18
110:11 117:2	product 50:17 51:8	54:22 57:7 59:19	quantified 107:19	75:19 97:20
136:14	51:10,11 52:8,12	71:21 73:10,14	107:20	108:20 128:1
prevent 21:8 92:5	52:22 53:4 64:21	94:18 95:1 97:15	quantify 62:7	rational 74:3
126:9	products 25:16	97:18,18 99:3	107:15 110:2	RBA 112:12 113:2
preventing 52:21	64:9,18 111:6	117:19,22 119:16	115:21	113:5,9,16,19
53:20 131:5	program 29:8	122:2 125:22	quantifying 49:17	RCVs 42:22 45:4
prevention 8:4	78:13 83:21 92:10	128:3,14 130:10	115:11	51:14 52:15 53:6
previous 48:15	92:15 93:1,1	131:4 133:17,18	quantitative	55:5
110:8	103:1 105:20	133:18 134:3	105:22 106:6	reach 89:6 109:22
primarily 16:4	112:4 113:22	135:7 139:6	140:6	109:22
primer 103:2,11	117:17 128:17	publications 81:5	Quarterman 55:14	reacting 37:6
principles 30:4	142:17,20	89:18 90:2,4	question 38:22	reactor 43:22
32:14 111:19	programs 94:6	publicly 23:9	40:13 57:8,20	read 49:11
112:10	112:1 129:20	published 46:9	58:17 60:2 66:14	reading 63:14
print 87:7	progress 109:17	89:17	73:12 117:6	readjusted 48:4
printed 68:1	project 15:4 43:4	publishing 81:4	118:17,17 120:12	real 56:20 88:3
prior 57:12	46:19 88:7 92:21	pull 46:2	125:13,20,21	116:7,12 119:22

<p>125:13 133:13 realistic 48:3 reality 104:12 realize 132:3 realized 54:1 102:6 really 4:18 5:4,5 7:10 8:8 10:18 17:15 25:20 26:21 34:3 58:16,22 70:5,11 71:9 88:14 90:7 94:3 95:22 96:7,22 105:20 109:11 117:4 120:9 121:8 124:19 125:14 126:15 127:12 132:12 134:22 135:4 137:18 142:1,10,13 144:2 reams 110:13 reappointed 6:5 reason 21:10 29:20 69:12 95:21 reasonable 107:21 reasons 72:8 107:9 recall 11:2 received 14:12 23:11,15 24:4 33:2 47:7 receiving 136:20 recognize 80:15 recognized 37:13 recognizes 114:14 recognizing 40:3 recommendation 16:19 33:14 45:6 57:15 recommendations 14:5 24:12,15 33:18 54:17 71:14 101:8,9,10 103:16 123:4 recommended 28:20 32:12 91:22 reconvened 78:10 record 5:12 12:2 72:4,6,17 76:21</p>	<p>78:7,8 131:21 132:8 recorded 9:21 records 104:7,15 130:6 redirected 116:11 reduce 19:18 21:8 31:14 79:13 reduces 53:4 reducing 18:15 reevaluate 105:17 126:9 referenced 117:9 references 27:3 refined 25:16 64:9 64:17,21 refineries 111:2 refining 106:9 110:15 126:15,16 reflect 143:5 regard 99:3 122:19 regarding 57:8 65:9 71:3 110:13 111:11 regardless 63:4 region 88:10 Register 46:9 regs 62:18 regular 80:22 89:5 135:19 regulated 99:12 regulation 44:10 101:19 117:8 regulations 25:1 30:7 32:19 40:16 41:16 45:13 61:22 62:17 65:9 66:15 66:21 67:21 68:2 71:3 112:12 117:10 121:22 126:19 regulations.gov 10:6 regulators 12:13 88:13 129:19 130:5,12 regulatory 44:8</p>	<p>45:21 62:4 128:8 rehabilitated 58:21 reinvent 82:11 relate 142:5 related 20:4 23:17 62:4 99:8 127:6 relationships 97:13 relatively 8:11 77:2 85:6 release 28:9,13,17 38:1,17 48:7,10 49:16 50:2,20 52:7,9,12,14 53:8 53:11 61:8,16 70:18 91:18 94:11 95:6 released 38:14 50:17 53:4 56:7 releases 42:17 44:20 49:15 50:10 51:4 52:4 54:6 relevant 17:3,7 27:4,8 90:8 121:21 127:4 reliability 46:17 rely 30:3 remain 25:17 remaining 110:7 115:12 remains 52:22 122:14 remarkable 136:14 remarks 4:15 9:11 remediate 131:20 remember 58:19 remiss 8:13 remote 42:13 45:9 45:16,19 remotely 3:9 42:6 44:11 removal 101:20 repair 109:2 115:7 115:7 repeat 9:12 repeatable 137:7 replace 100:13 109:4 115:8 116:6</p>	<p>replaced 43:1 44:16 51:15 52:16 55:6 replacement 57:9 replacing 68:3 116:2 report 14:12,14,22 16:15 17:2,21 19:8 23:6,18 24:14 25:7 26:8 26:11 27:18,20 28:4 33:2,12 34:4 34:17,22 38:13,18 40:8,21 41:14 45:5 46:7,22 47:15 48:17 49:11 56:3,8,15 57:22 57:22 58:2,4,4 61:11,15,20 65:3 65:12 67:9 142:15 reported 36:5,7 37:7 142:22 reporter 12:4 reporting 26:11 56:8 135:2 reports 28:1 36:8 63:15 74:7 77:10 representative 23:5 73:10 87:16 representatives 84:22 85:2 133:18 representing 7:9 12:10,12,15,17,21 13:1,3,5 57:7 requalify 100:13 request 100:21 require 32:10 45:8 54:7 101:19 required 44:10 69:20 113:3 requirements 3:8 42:5 61:18,21 62:4 111:2 requires 44:9 61:1 112:14 113:1,17 research 13:13 43:17,18,19 44:5</p>	<p>46:13 75:14 92:22 102:17 resigned 8:17 resolve 117:1 resource 84:4 91:1 91:8 134:5 resources 54:13 68:7 81:8 82:7 86:18,20,22 87:5 90:8,13 116:10 123:12 131:22 132:2,9 134:9,12 141:2 respect 42:7 respecting 69:2 respond 44:20 98:3 responded 49:10 responder 28:6 responders 35:19 54:3 79:15 80:1,3 80:18 84:17 85:22 86:13 88:12,16 89:7 90:13,17 91:9 93:5,12 response 3:13 23:19 45:3 51:18 53:14 54:11 59:6 78:11,18,19 79:4 79:5,9,17 80:11 80:17 81:2,5,7,11 81:17,19 82:2,9 82:14 83:6,19 84:3,11 85:17 86:4,16 87:8 88:2 89:4 90:9 91:12 92:13,17,18 93:10 94:2 96:1 responsibility 133:8 restrict 67:2 restricted 70:5 restrooms 11:2 result 52:11 56:11 resulted 24:1 resulting 50:1 53:10 results 61:11,20</p>
--	--	---	---	--

62:2	126:8,8 138:2	113:7 114:22	seam 112:5 113:4	series 72:7
retiring 87:17	river 63:22 67:20	115:5	113:11	serve 6:7 82:13
revert 119:3	68:4,10,11 72:12	safely 53:15 100:5	seams 113:14	86:14 90:13
review 15:9 22:17	rivers 63:16 69:16	102:15 112:22	second 6:17 7:21	served 9:16
26:16 27:22 34:5	road 76:1	safer 124:21	31:16 34:12 36:6	service 3:17 89:18
35:5 39:3 56:10	robustness 30:2	safety 1:4,8,18,25	56:14 61:14 62:3	94:22 97:18 98:13
61:17 67:4 71:1	role 8:2 84:19	4:5,6 8:20,21 9:2	66:13 67:1 82:18	102:16,18 103:1
113:17 132:21	133:5,6 134:20	10:15 13:3 44:7	84:7 121:9 140:7	103:11,18 105:2,4
reviewed 20:1 22:4	135:10,21 141:19	50:12 51:5 53:5	secondly 68:16	105:10,12,14,18
32:19 47:4	roll 80:4 135:6	60:15 78:15 92:12	Secretary 100:10	105:19,21 106:3
reviewing 20:6	rolled 19:21	94:18 95:1 97:19	101:11	106:17,22 107:2
22:9	Ron 15:5 123:18	99:4,13 101:2	section 15:14,15	108:7,16 109:7
revision 48:12	Ron's 127:15	102:3 106:7,11	44:9 47:21 48:5	110:20 111:11
revisit 113:9	room 1:13 17:6	108:1 111:1	60:22	112:10 113:22
Richard 1:21	28:14,16 36:3	115:12 117:8,10	sections 27:8	114:5,10 115:5,17
125:18	37:10,21 143:13	131:18 134:4	see 4:21 5:5 9:4	117:8 118:14,18
Rick 12:22 121:10	rooms 17:10	136:11	19:16 24:9 37:18	118:20 126:4,12
123:14 139:19	Rosekind 21:17	Sam 2:12 78:11,11	38:12 39:15 47:15	126:14,20 127:11
Rick's 120:15	Rosendahl 87:13	78:13 95:12	55:19 56:4 59:21	128:16 129:12
121:5	round 56:14	sample 23:5 134:10	60:21 64:5 69:9	137:17 138:20
Ridge 3:8 42:4,11	rounds 57:3	Sam's 97:21 137:3	72:4,6 73:22	139:21
43:2 46:5,8,11	RPs 67:22	San 45:6 63:22	77:10 87:20,22	services 1:18 92:15
47:5,11,17,20,20	RTD 13:16	sausage 73:19	98:17 101:4	serving 122:18
48:4,11,16,21	rule 121:13,14	saw 95:6	123:17 127:10,20	session 4:19 5:6
49:10,13 50:9	122:22	saying 6:6 29:15	131:4	6:13 139:1
51:1 52:2 54:15	rulemaking 34:2	35:16 56:15 64:6	seeing 75:22	set 4:20 66:3,6 89:1
55:2 57:14	56:21 71:17 72:1	79:21 100:18	seeking 85:1	109:8 114:15
Ridge's 52:9 55:4	73:17	122:12 124:17	seen 40:9 111:21	sets 63:2 66:2 69:12
right 12:8 13:15,18	rulemakings 59:15	129:4	119:8 121:3	114:22
20:16 21:11 31:6	rules 11:17 121:11	says 36:8,21 75:8	sees 30:17	setting 32:20
36:11,12 41:6	121:12	SCADA 25:9 27:14	segment 53:1,12,17	seven 47:8 48:1
56:21 59:3 60:21	run 125:11	48:14	54:8 114:14,15	severe 107:6
73:18 77:8 93:15	running 72:11	scenarios 22:16	segments 18:18	share 75:22 88:21
98:22 119:1 120:7	runs 7:16	41:5 49:16 52:9	84:2	Shaw 14:21
124:1 130:10	rupture 48:9,20	schedule 113:1	semantics 126:2	shells 99:9
132:18 134:11	52:8	scheme 128:9	send 10:12 59:11	Shelton 1:23 12:20
137:10 145:17	ruptures 15:18	schemes 132:14	sensitive 38:4	12:20 55:20,20
146:2	40:6	school 97:22	106:8,11 115:12	56:9 57:4 102:22
rigorous 136:21	Rush 55:16	science 43:6 44:4	sensitivity 31:1,5	103:9 117:12
rip 119:17	R&D 18:9 19:11,15	118:4	sensor 28:22	118:16 119:1
risk 45:3 68:18	19:21 29:15 31:12	sciences 43:21	sensors 19:1	139:10 144:18
69:22 111:21	46:21 54:18	scientists 43:13,17	sent 55:13 94:10	Shelton's 57:20
112:20 113:18		scope 14:10 16:10	97:22	shorter 115:2
116:1 124:1,2	S	18:1,5 22:3 46:8	separate 4:19 6:16	shoulder 133:4
132:13,19 137:15	Sacramento 89:15	50:15 52:2 54:21	separation 50:19	shoulders 129:4
142:10,16,19	sad 87:19	scour 72:14	September 81:17	show 52:15 97:22
risks 116:8,13	safe 102:20 104:22	se 29:6	sequence 50:17	119:18

showed 68:2	smaller 40:11 83:22	space 106:14,15,17	Starbucks 10:17	79:14
shown 68:12	smart 18:20 136:21	spaced 45:11	start 7:4,11 41:8	strictly 121:11
shut 41:8	SMS 123:19 126:3	spacing 45:18	53:15 74:2,10	strides 129:18
shutdown 42:12	126:12,15,20	spallation 44:1	78:10 85:3 114:3	structural 43:21
45:1,9 46:15 48:2	127:11,12,12,19	speak 11:21 12:1	121:20 145:21	structure 80:3
shutoff 3:9 42:6	127:21 134:19	102:22	started 7:7 102:4	structured 134:22
44:11	135:12 136:5	speaking 9:10	starting 12:8 73:11	studies 3:5 13:8
shy 143:16	138:19 142:3	special 7:1	73:22 120:11	26:3 47:22 52:15
side 11:22 16:5,19	snow 4:10,11	specific 14:19 25:6	starts 118:8	study 3:8 13:17
16:22 57:15 117:3	socioeconomic 54:5	34:1 50:18 60:18	state 1:24 12:1,12	14:2,4,11,16 15:7
significant 14:22	software 29:8	specifically 13:14	12:13 45:21 55:18	15:12 17:8 18:1,6
21:14 49:7 100:21	solicit 124:5	15:14,15,21 18:11	70:10 75:16 83:8	19:6,7 21:1,2 22:1
significantly 75:17	solicitation 19:11	21:6 27:5 33:5	85:11,20 86:1	22:4,17,18,22
similar 23:20 88:10	19:22 47:2	34:7 117:9	110:2 115:21	27:7,22 29:4 42:5
Similarly 54:4	solid 118:4 121:6	specified 108:16	116:21 131:9	42:13,19 44:3,6
simple 71:5	solution 50:6 102:7	Spectra 81:15	statement 12:2	44:19 46:5,8,11
Simplifying 49:20	102:8,14	spend 68:16 86:7	25:4 64:11 123:14	46:19 47:6,13,18
simplistic 91:19	solutions 79:22	134:13,15	statements 24:22	47:20 48:2 49:13
simply 90:20 93:12	82:12,20 86:16	spending 68:8	25:6,19,20	50:3,9 51:1 52:2,9
93:20 109:4	101:15	spends 74:18	states 88:18 132:4	54:15,21 55:3,4
simulation 15:2	solve 86:10 118:10	spill 51:20 64:2,21	134:15	56:18,19 59:11
single 102:6	solving 86:9	spills 51:21	statistical 37:18	60:2 61:1,5,11,20
sit 34:19	somebody 125:11	spoken 94:4	status 19:6	62:2,7 63:3 67:2
site 50:18	143:20 144:3	sponsored 81:15	staying 130:3	70:4 72:21 73:5
sitting 145:22	soon 39:18 61:13	spot 35:7	stays 105:15	74:16 93:4 110:14
situation 68:9	sooner 33:13 97:3	spotted 130:7	steady 104:11	stuff 41:17 119:14
situations 77:1	sophisticated 32:7	spread 53:21 91:15	steal 127:15	122:13,14,19
93:11 129:20	sorry 4:9 12:6	Square 1:14	steel 104:3 114:16	124:13 141:17
six 41:4,10 64:17	35:22 36:11 40:17	staff 3:4 5:1 6:19	114:19 119:10,11	142:4,18
86:6 101:11	119:5 125:16	43:12	stent 108:10	subcontractors
size 83:22 87:6	128:4 137:12	staffed 43:11	step 17:11 20:7	14:20
sized 127:8	139:11	stage 73:15	33:9,11 65:2,7	subject 95:3 109:9
skim 95:14	sort 6:18 25:12	stairs 11:6	139:2,5	109:10
slap 137:19	34:18 35:1 37:10	stakeholders 17:16	stirred 117:2	subjected 107:6
slice 134:10	38:21 57:1 60:1	18:14	stood 63:21 85:16	submit 39:10 60:3
slide 35:16,22 36:1	61:9 73:12 76:7	stand 9:12	86:5	submitted 26:7,18
36:12 39:21 40:14	123:7 136:1	standard 68:6	stop 40:5	28:2 47:9 56:2
47:14 60:20 68:22	141:14	104:1 107:13	stopping 52:22	subsequent 53:11
85:18 89:21 90:6	sorts 10:8 18:22	137:18	storage 112:4	subset 127:10,12
93:16 110:9	sought 46:19	standards 1:8	straight 5:20 28:18	127:22
120:16	sound 71:3 100:16	22:16,17 30:6,8	straightforward	substitute 142:19
slides 23:21 35:13	133:2 140:5	32:15,18,21 40:15	70:21	subsystem 29:4
35:13 120:17	sounds 126:5,11,21	41:13,15 67:22	strange 58:17	success 88:20
slightly 28:5	source 49:8	100:2 104:4 107:5	strategic 86:13	successes 89:3
137:22 138:2,11	sources 44:1 49:7	standing 9:17 83:5	strategy 53:7	successfully 115:16
small 15:18 37:8,12	southern 88:9	standpoint 125:22	stream 74:20 75:11	135:8
37:15 114:16		stands 84:10	strengthening	sufficiency 65:9

67:4 71:1	32:7,11 46:20	tanker 84:15	74:18 87:12 138:3	57:2 59:2,20 60:1
sufficient 61:22	54:10 90:16 91:1	tanks 110:21	138:8	66:1 67:14,17
62:5 67:19	91:5 108:3 110:1	target 132:18	thank 8:8 11:11,12	70:17 71:8,13
suggestions 25:13	135:1 137:22	Task 84:22	13:6,10,11,11	73:19 74:2,3 76:5
suitability 105:11	142:4 143:14	team 14:19 15:5,10	33:20 41:21,22	77:3,7,18 79:19
suitable 105:10,13	systems 15:2 17:19	17:5	42:2 55:9,11,18	84:5 88:3,19,20
109:1 125:9	18:17 19:16 20:13	technical 1:7 15:16	55:21 60:5,6,8	89:2 90:8,10
summarize 54:14	21:5 27:13 29:18	15:21 16:5 22:8	65:14 70:2 74:13	91:15 96:10 97:9
54:14	32:16 36:22 39:21	23:17 29:20 42:20	76:2 77:20 78:4	99:17 105:7
summary 14:11	46:3 102:20	47:12 51:12 92:9	78:12 94:7 98:7,8	116:14 119:6
17:21 19:8 23:22	113:13 115:20	92:11,15 111:13	98:18 103:9	120:1,19 123:12
24:8,17,20 46:7	127:21,22 141:16	131:13	118:10 141:6	123:13 125:15
summer 96:16	143:6	technically 44:13	144:17 145:10,18	126:2 127:2,7,14
Sunoco 1:23 12:21		52:18 55:7 119:12	146:3,4	127:19 128:8
super 43:15	T	121:15	thank 144:19	129:1,18,22
supplemental	table 6:17 24:20	technique 125:8	thanks 57:4 67:6	130:17 131:1
26:10	27:5 87:11	techniques 104:14	68:19 98:5 103:7	132:17 133:7
suppliers 22:20	tabular 112:17	technologies 22:10	144:15	135:8,20 136:4,15
23:2	tackle 82:8 102:5	32:11	thermal 49:22	139:18,21 140:2
supposed 126:7	tackling 123:9	technology 20:10	53:13	142:8,13
sure 9:10 13:21	Tahamtani 1:24	20:11,14 22:19	thing 10:15 40:7	thinking 132:22
35:12 36:12,18	12:11,11 33:8,20	23:2 37:11 38:7	58:15 63:20 69:22	thinks 119:16
37:4 39:6 59:18	take 6:22 21:1	40:1 43:19 44:12	86:11 90:16 122:8	third 37:16 146:1
66:9 68:15 82:22	34:18 35:9 55:10	46:17 113:12	126:5 137:14	Thirty 39:12
95:11 97:5 100:4	57:16 68:15 73:17	115:18	141:14	thought 4:11 39:4
100:14,15 105:13	82:13 100:12	tell 34:19 72:21	things 5:3,16 10:8	77:5 142:18
106:16 113:18	101:1 102:10	96:22 127:7	17:12 18:15 21:12	thousands 43:17
117:1 130:9	121:9 122:15	133:21 134:6	25:12,15,16 26:22	108:11
132:21 133:2,8	123:5,10 129:11	145:20	27:3,16 31:16	threats 104:11,18
surface 95:14	138:12 139:2	telling 75:3 117:5	34:5 36:8 38:8	three 71:9 97:8
130:18	talk 14:6 41:15	temperature 43:22	41:8 62:6 66:19	121:19
surprised 36:19	77:19 80:13 89:2	ten 6:8 75:17	68:15 71:9,19	threshold 37:10,20
65:17	105:4 112:2,7,8	tend 37:15	72:7 73:3 75:2	thrive 100:16
survey 134:1,1	121:14 124:13	tends 73:20	76:22 79:7 84:5	thunder 127:16
susceptibility 112:5	126:3 135:12	Tennessee 43:8	90:1,5,22 91:16	Thursday 6:14
suspect 76:15 95:2	141:17 144:10	tensity 50:1	91:19 94:4 96:10	Tim 7:22 8:8 12:16
sustainability	talked 15:15 16:20	tent 11:22	108:2 113:18	84:17 95:22
82:19	17:5 25:8 90:1	term 102:18	120:22 124:6,18	time 4:9 5:11 6:2
sustainable 137:3,8	134:5 136:10	terms 92:3 139:21	126:1 128:12	10:2,2,17,22 18:3
swiftness 42:15	talking 6:20 13:14	terrain 50:22	132:16 133:13,16	19:6 20:19 22:22
45:1 49:18 51:2	13:19 14:4 19:17	test 30:2 112:15	133:17 134:3,7	26:13 28:3 29:22
53:9	27:14 36:13 76:15	126:8	138:17 143:2,5	31:6 34:8 38:12
Swiss 21:10	95:20 123:19	testing 108:13	think 6:1 7:7,11 8:3	42:3 47:9 49:22
sympathize 6:11	126:2,18	111:22 113:3	8:14 9:1,3 11:4	51:18 53:14 54:7
system 10:5 15:17	talks 17:9 34:1,7	114:8,11 129:14	14:16 16:11 21:16	60:3 74:19 76:20
17:14 18:16,20	83:17	tests 104:5 113:8	34:13 37:12,17	86:8 93:18 95:14
21:19,20 29:11,16	tank 112:4	Texas 9:1 63:22	38:3,19 40:2,9	102:12 105:16

107:3,16,17 109:19 110:5,14 113:15 121:10 124:21 125:5 128:7 134:10,10 134:14,15 136:7 142:18 145:8,19 times 5:21 59:6 63:12 77:14 TIMOTHY 1:20 Tim's 8:1 95:15 title 42:10 45:7 60:19 today 4:18 5:3,16 12:5 13:22 34:13 43:5 49:3 59:9 69:20 70:12 78:16 78:22 94:11 100:5 113:9 117:1 137:5 145:12,19 Todd 1:19 12:14 123:7 139:12 told 10:18 66:6 69:17 tolerance 108:3 tomorrow 5:10,14 6:11 10:16 11:18 122:7 123:18 127:15 137:7 144:11,21 145:4 145:14 tomorrow's 143:15 tools 49:15 top 43:15 72:18 85:10 topic 128:2 topics 122:3 124:12 total 23:14 24:14 53:3 totally 133:22 touch 34:4 touched 123:7 tough 69:22 town 4:8 to's 91:19 traceable 104:7 track 10:7 24:13	trade 81:5 traditionally 84:13 trail 118:7 trained 32:8 training 17:6 83:12 83:14,16 84:1,16 85:4,21 88:15 91:10,12 TRANSCAER 84:9,9,19,20,22 85:3,4 transcript 9:22 10:2 transcripts 46:6 transferrable 88:18 transmission 16:21 42:16 43:1 44:15 44:19 45:21 51:7 51:9,10,15,19,22 52:10 55:6 91:3 111:15 134:14 transparency 54:20 135:6 139:6 transportation 1:1 44:4,10 84:10,14 85:5,14 traverse 94:20 TRB 7:7 treated 114:22 treating 10:21 tremendous 87:21 TRFL 41:1,18 tried 62:7 66:4 122:9 trigger 107:10 truck 84:15 true 29:7 77:3 118:15 truly 79:1 trust 1:25 4:13 6:11 13:3 128:14 130:10 133:19 136:11 truth 117:5 try 9:18 10:3 20:12 39:6 82:7 83:3	85:11,21 trying 19:18 21:21 59:9 69:21 74:10 77:6 79:6 86:8 102:4,17 118:16 119:7 132:17 TUESDAY 1:10 turn 4:16 6:17 11:20,21 81:9 103:8 116:14 two 5:10 11:17 15:16 16:2 30:2,5 30:9,9 44:2 57:8 57:12 67:13 69:11 82:4 87:9 97:7 101:9 110:17 112:9 143:2 type 50:16,21 101:20 types 28:6 46:2 113:4,11 T-A-B-L-E 3:1 <hr/> U <hr/> ultimate 133:8 ultimately 93:4 unable 69:3 unbiased 136:1 unconventional 99:9 underscore 135:10 underscoring 9:17 understand 9:20 32:4 94:21 102:18 118:17 understandably 17:18 understanding 22:21 24:17 25:10 45:15 73:21 91:2 109:8,12 115:15 understood 109:16 undertaken 80:8 unfortunately 63:1 87:18 121:1 unfulfilled 73:5 unintended 46:21	50:10 53:8 unique 63:16 114:15 uniquely 102:2 universe 70:5 university 43:8 93:3 unpredictable 29:13 update 33:17 65:8 90:12 updated 91:13 updates 5:2 upwards 41:10 URL 89:21 93:19 use 29:4 41:10 44:10 48:8,13 68:7 79:18 92:3 108:21,21 110:15 121:20 137:20 useful 32:17,20 37:22 user 43:16 uses 79:20 USGS 66:2 usually 25:18 33:15 117:22 UT 43:9 U.S 1:1 4:5 <hr/> V <hr/> valid 131:1 validation 73:13 valuable 14:8 32:14 value 9:16 37:14 valve 3:5 13:8 42:13,14 46:15,21 47:19 49:18 51:2 51:6 52:20 53:9 54:1,18 valves 13:19 44:12 45:9,9,16,20 variables 143:10 variety 5:1 80:8 111:3 various 103:12	124:18 vast 37:5,7,18 vehicle 80:4 vehicles 106:14 vendors 29:9 verbatim 24:10 verifiable 104:7 verification 30:15 verify 118:3 versus 46:3 126:3,3 vertical 75:15,19 vessels 110:21 vested 128:15 view 83:14 views 56:16 violation 144:4 violations 134:7 Virginia 1:14,24 12:12 86:1,2 95:18 visit 140:16 visitors 43:18 voice 86:12 volatile 64:9 volume 48:7 53:3 64:2,21 volunteer 10:21 vote 121:11,12 votes 5:10 9:8 145:15 voting 10:16 <hr/> W <hr/> W 1:18 wait 35:1 78:21 waiting 69:17 walk 81:8 wall 52:6 want 5:8 10:12 14:18 19:3 20:2,7 20:10,12 21:3,22 30:12 31:9 38:16 39:17 40:4,22 56:19 68:16 74:5 76:4,12 79:13,21 86:10,11,14,17,19 86:21,22 88:17
---	---	--	--	---

94:10 112:8 119:21 120:5,9 122:10,16 124:13 133:10,12 135:9 141:10 144:18 wanted 4:18 6:22 9:5 35:11 36:17 58:16 71:7 72:19 84:7 120:13 121:8 war 120:8,11 warming 123:22 Washington 4:12 wasn't 17:1 27:20 36:18 70:9 water 61:2,3,4 62:10,12,13,14,20 62:21,21 63:2,4,7 65:6,20 66:5,12 66:17 67:3,5,19 69:2,5,5,7 70:19 waters 63:13 65:18 65:20 Watershed 1:22 waterway 63:11 waterways 69:1 way 7:16 11:3 19:2 31:14,16,18 37:6 38:2 59:5 80:7 93:20 96:5 102:9 108:15 109:17 119:8 122:6,11 130:10 132:18 Wayne 6:15 ways 29:13 32:20 92:5 128:10,11 wear 98:2 webcasted 23:9 webinar 23:7,9 47:5 55:1 website 10:10 23:12 24:6,9 33:3 46:8,22 47:16 64:5 89:22 95:7 websites 92:18 weighted 112:19 Weimer 1:25 13:2 13:2 57:18,19	58:3 65:15,16 66:13 67:6 125:19 125:20 weird 59:5 welcome 4:8 79:10 95:19 went 18:4 26:13 36:4,11 48:4 58:22 78:7,7 weren't 93:13 Westin 1:13 we'll 5:10 9:3,7 10:3,12 11:17 13:7 39:10 49:2 56:7 60:19 76:15 77:18,22 97:12 101:18 106:9 122:5 123:1 124:13 135:11 136:6,7 139:5 142:7 143:19 145:19 we're 5:9 6:16 19:17 20:6 27:14 33:17,19 34:3,13 35:6 36:13 59:9 64:4 68:14 70:1 71:14,18 74:10 81:1,3,4,6 83:2 87:19 89:5 96:7 116:22 117:16 118:9,9 124:8 126:2,21 133:18 136:16 140:12,19 141:17 143:16 145:11,22 146:2 we've 5:1 7:5 16:13 17:12 75:13 78:9 80:8 81:11 82:5 83:9,20 85:16,20 85:22 89:8,17,22 90:3,3,17 91:4 95:13 99:6,10 100:8 121:3 122:13 123:22 124:1 129:18 130:19 134:1,6,8	140:13 wheel 82:11 when's 38:13 white 19:22 20:3 47:3 91:16 wholesale 111:16 wide 66:6 111:3 widely 115:10 width 61:2 63:5 69:10 Wiese 1:17 4:3,4 6:4,10 34:11 37:2 37:5 38:19 39:17 56:13 58:15 71:7 76:4 78:2 94:8,9 95:9,12 98:5 119:6 120:13 127:2 133:12 141:8 144:19 145:2,6,18 Williams 87:16 wish 11:21 97:2 withdrawn 27:7 wonder 37:2 wondered 94:9 wonderful 82:16 wondering 146:1 word 48:8,13 70:17 79:18,21 132:18 words 7:20 105:1 109:17 117:13 work 8:17 17:7 36:22,22 38:11 59:17 74:4 75:12 78:13 97:21 99:7 100:19 101:13 111:20 117:15 124:5,9 131:12 133:17,22 135:4 worked 46:15 135:7 working 9:1 18:10 18:13 46:14 70:1 77:13 85:17 86:4 86:4 87:8,19,22 88:10,11 117:16 144:6	works 103:18 workshop 17:13,22 18:3 19:5 45:14 46:1,7 54:18 workshops 16:13 124:1 world 79:4,5 103:20,21 120:20 120:21 121:2 135:13 worlds 43:15 worst 48:5 52:3 140:17,20 worth 4:14 63:9 wouldn't 59:22 118:14 wrap 3:22 59:16 written 90:3,4 134:7 wrong 10:1 73:18 125:5 130:1 139:16 www.pipelineem... 83:15	<hr/> Z <hr/> zone 49:3 82:1 89:11 zones 75:14 <hr/> \$ <hr/> \$1.65 43:14 \$300,000 93:3 <hr/> 1 <hr/> 1 22:7 1,600 43:13 1:00 1:14 1:03 4:2 10 16:20 100 23:15 61:3 62:12,21 69:1,10 104:1 118:13 119:12,20,20 134:2 105(b)(1) 48:6 11 1:10 3:3,4 11-11 45:7 1130 27:9 1155 27:6 116 3:20 12 87:15 13 3:5 135 132:3 14 72:3 144 3:22 16 63:13 64:2,13,15 64:22 65:5 18th 18:8 46:12 19th 18:8 46:12 1910 111:1 192.935C 45:8 194.105 48:5 1943 43:3 195 25:1 195.303 111:21 1994 63:21 <hr/> 2 <hr/> 2 60:10 2,800 65:18 68:22 2,841 62:8
--	--	---	--	---

2.0 122:11 123:22
124:8 126:16
129:1 139:1

2.6 132:5

2:08 78:7

2:30 78:3,4,8

20 20:4 53:18 63:6
63:9 64:12 72:3

2000's 83:10

2001 44:9

2010 22:7 96:16

2011 60:17,22
67:14 81:17,20

2012 1:10 17:13
22:7 42:10 45:14
46:12 47:4 54:16
63:8 91:13

26 101:10

26th 23:11 47:8

27 17:13

278 24:14

28 45:14 60:22

3

3 45:11 78:10

3rd 33:13 101:6

3:33 146:6

30 15:1

300 132:4

33 3:6

37 101:5

4

4 44:9 45:11 98:13

4,400 43:12

400 1:13

42 3:10 47:12

452 112:1

48 62:19

49 25:1 45:7

5

5th 23:8 47:4,8

50 99:21 119:20

55 3:11

579 110:16

6

60 3:12 99:21

62 64:1

653 112:3

66 1:19 12:15

662 41:13

7

7 22:7

70 99:21

72 68:22

76 71:15

78 3:13 71:15

8

8 15:14

8A 15:15

80 99:21

9

9:00 145:20,21

90 20:3 48:2 99:21

91 63:8

911 94:19 95:21

96:13,17 97:5,15
97:17

94 3:15

98 3:17

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Liquid Pipeline Advisory Committee

Before: Pipeline and Hazardous Materials Safety Admin.

Date: 12-11-12

Place: Alexandria, VA

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
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